



16S Technologies

Austin, Texas

16S Technologies is leading the field in development of DNA technologies for the energy industry. Initial applications based on 16S patent pending technologies include biocorrosion mitigation and DNA tracers. A full analytical laboratory is operated by 16S allowing us to complete the complete all work in house and develop new technologies quickly and cost effectively. In addition, a newly opened manufacturing facility in South Austin will enable economy of scale in purchasing and provide ample tracer production capacity. A robust patent portfolio protects key parts of the business and 16S is actively involved in additional filing and IP surveillance. Recent additions to the team, manufacturing expansion and technical wins have 16S poised for substantial growth in oil and gas with an eye to the untapped market in DNA analytics within other industrial market segments.

www.16stechnologies.com

Royce Ferguson / royce.ferguson@16stechnologies.com



2S Water

Edmonton, Canada

2S Water have developed a sensor to detect metals in water in realtime. The current solution is grab samples which are sent to the lab, a time delayed and error prone process. 2S Water believes we can do better. Realtime information is essential for process optimization, regulatory compliance, and early issue identification. Our first target market is mining, an industry plagued by regulatory fines and water quality issues, and ripe for data driven process optimization. Most of these issues focus around metals that, up until now, no one could detect in realtime. 2S water have developed technology to detect the undetectable, providing realtime data in a fully automated system that provides the instant feedback that facility operators need. Further applications include petrochemicals, forestry, and municipalities. 2S Water wants to make the world's water safe and understood. With realtime data, we can protect water, protect the environment, and protect facilities.

Anthea Sargeant / asargeant@2swater.com



AdBm Technologies

Austin, Texas

Complying with underwater noise regulations can be a significant challenge to offshore contractors, requiring modifications to project plans and the use of large, cumbersome, and slow-to-install noise abatement systems. The AdBm system uses injection-molded and customizable acoustic resonators to optimally treat noise. These resonators simply surround the sound source, and once in place they passively absorb noise. The AdBm acoustic elements are leased on a per-project basis with pricing based on usage and margins often exceeding 90%. The system has been successfully demonstrated and is currently being utilized on its first commercial installation project at the Borssele Offshore Wind Farm.

Mark Wochner / mark@adbmtech.com



ADL Completions

Moscow, Russia

ADL Completions is a modern high-tech company with a team of highly skilled professionals that offer a solution-focused approach to each project. The solutions offered by ADL Completions will allow producing from all laterals of a multilateral well and enable precise re-entry into the main and sidetracks during production. We offer solutions suitable for new wells and existing multilateral wells with casing strings of any size.

<https://adlcompletions.com>

Alexander Kashlev / a.kashlev@adlcompletions.com



Alan AI
Sunnyvale, California

Alan is building the “context-based conversational voice AI platform” to enable natural voice interface within any enterprise application. Alan Voice AI Platform enables the development of the domain language model for each enterprise application. These voice interfaces offer hands-free experiences and the speed and convenience will start the next revolution in the Enterprise applications. Enhancing the existing applications' Visual UI with a Voice Interface will give the ability to get work done using voice without having to touch or type on phones, tablets, and computers. Our first market is field service applications that will benefit from a hands-free experience. A conversation voice experience that augments an existing application UI will improve safety, providing real-time accurate data from operations, reducing costs and is required by law in North America. The broader opportunity is to transform the mobile experiences for over 50 Million Mobile Employees, a \$10B/year market opportunity in North America.

<http://alan.app>

Ramu Sunkara / ramu@alan.app



Blue Planet Energy
Honolulu, Hawaii

Blue Planet Energy, founded in 2015 by the entrepreneur behind the video game Tetris, is replacing the decaying electrical grid with a distributed model that empowers residential and business customers to be energy independent while accelerating renewable energy adoption. Our scalable energy platform, Blue Ion, combines a best-in-class battery with superior safety (no fire risk) and longer lifetime with sophisticated software controls to create smart, flexible microgrids. Our strong track record of delivering premium products along with excellent service and support has accelerated our growth in recent years. Our products are adopted widely in off-grid and grid edge markets across North America. We recently completed supplying the largest energy resilience project in the US for the American Red Cross, which includes over 6MW of solar and 11 MWh of Blue Ion energy storage across 110 microgrids in Puerto Rico.

<https://blueplanetenergy.com>

Christopher Johnson / chris@blueplanetenergy.com



Bluware
Houston, Texas

Bluware enables the oil and gas industry to explore the full value of seismic data without the limitations forced by data size and current interpretation software. We help increase E&P workflow productivity through cloud solutions and deep learning, so geoscientists can make faster and smarter decisions to reduce time to oil.

www.bluware.com

Suri Bhat / suri.bhat@bluware.com



C-Power
Charlottesville, Virginia

C-Power is an ocean energy company providing power at sea—from 10 watts to 10 megawatts—for offshore energy, defense, aquaculture, data, and other markets. We are a global leader in ocean energy systems, applying the knowledge gained over the last ten years of R&D to design, develop and deliver power solutions that meet customer needs. Our focus is delivering products that provide ‘local’ power, data transmission, and real-time communications capabilities where none exists today. Our unique combination of proprietary technology, design expertise, and ocean energy experience delivers significant cost savings, decarbonization, and other capabilities not currently available in the offshore market.

www.columbiapwr.com

Reenst Lesemann / rlesemann@columbiapwr.com



Cemvita Factory

Houston, Texas

Using synthetic biology approaches, our biomimicry platforms capture and convert CO₂ into valuable chemical products and facilitate the remediation of contaminated sites. Our technologies work at ambient temperature and pressure, thus reduce the energy demand and carbon emission from traditional oil and gas processes. As a result, our chemical products can be certified as carbon negative. Furthermore, we scale-up and integrate our technologies into the clients' production pipeline to produce target chemicals at industrial scale with comparable or lower cost. We aim to reduce the CO₂ liability and create new revenue sources for petrochemical companies.

www.cemvitafactory.com

Truong Nguyen / truong@cemvitafactory.com



Cleargistix

Mandeville, Louisiana

Cleargistix attacks the #1 enemy of efficiency and effectiveness in the oilfield, the paper service ticket. Our Digital Field Ticketing Solution allows oilfield companies to digitally capture a wide variety of information in the field (JSAs, inspection documents, payroll forms, expense reports, etc.) and to digitally route that information through any type of workflow, saving costs, shortening cash cycles, improving efficiencies and providing real-time business intelligence. Our focus on configurability, flexibility and field usability sets Cleargistix apart.

<http://www.cleargistix.com>

Steven Toups / steven.toups@cleargistix.com



Czero

Santa Barbara, California

C-Zero is developing technology for removing the carbon found in natural gas, which will allow its customers to enjoy low cost, on-demand energy without producing CO₂. The company's proprietary process utilizes high temperature liquid catalyst systems to break down methane - the primary molecule in natural gas - into hydrogen and solid carbon. The solid carbon can either be sold or permanently sequestered, while the hydrogen can be used as an industrial commodity or combusted to produce electricity and heat. When renewable natural gas is used as the feedstock, the company's technology is carbon negative, removing approximately 400 tons of CO₂ equivalent from the atmosphere for each GWh of energy produced.

www.czero.energy

Zach Jones / zach.jones@czero.energy



DAMorphe

Houston, Texas

DAMorphe applies nanotechnology materials science, commercialized and industrialized by the US military over the last 30 years to solve problems in oil & gas, life sciences, consumer goods and other industry sectors. The company combines cutting edge materials design and fabrication capabilities with innovative mechanical, electrical and electronic sensor design to produce differentiated products. In oil & gas, the company developed and introduced industry-leading dissolvable frac plugs and balls with superior performance and lower cost. Another product is a flowable sensor making downhole measurements faster and far lower cost than a logging run.

www.damorphe.com

Ting Roy / tcroy@damorphe.com



dataVediK
Houston, Texas

dataVediK is an early stage startup specializing in Big Data, Data Analytics, Machine Learning and end-to-end Data Ecosystems for Oil & Gas Industry. Our mission is to Create an AI Platform to foster effective collaboration between Domain experts and Data Scientists to solve complex business problems in Oil & Gas industry. dataVediK is building a hyperconverged data and analytics software platform to satisfy the critical customer business needs around optimizing operations costs, enhancing employee productivity, improving safety, maximizing revenues and the ability to make faster and reliable decisions using the power of Machine Learning.

www.datavedik.com

Sunil Garg / sunil.garg@datavedik.com



DC3 Control
Corpus Christi, Texas

DCiii (DC3) Control optimizes production chemical injection programs through advanced technology, monitoring, data, and transparency. Our customers continuously experience a reduction in chemical spend, assurance that assets are protected, unmatched collaboration & transparency with vendors, improved safety with reduced liability, & access to critical data 24/7. Customer's ROI is Seen in 4 Days to 3 Months. DC3's flagship product is the Mirador Chemical Injection System. The Mirador uses proprietary, patent-pending, hardware specifically designed for easy field retrofitting of oilfield chemical injection tanks, in unison with our edge computing controller with propriety control functions developed by a team of over 10 engineers in a 1-year period. We offer cloud based-solutions as well as internal SCADA solutions for all types of customers. All of our systems are proprietary, with over 4,000 hours of development time. Our flagship product is patent-pending, & our proprietary hardware components are exclusively designated as IP to DCiii.

www.dc3control.com

Chad Hammond / chad@dc3control.com



DelfinSia
Houston, Texas

Delfin is a text analytics company working with two oil super majors. We dramatically boost our clients' performance and efficiency by enabling them to instantly access intelligence from across their unstructured files. We start with scanned pdfs and other pre-OCR or post-OCR documents, and then we allow the clients to automatically create master tables of data from across those documents, often saving hundreds of hours and eliminating the risk of overlooking important data. We automatically assign client tags to reports or other bodies of text, also saving hundreds of hours and eliminating the human error from the rote tagging process. Our tool also allows clients to ask questions of their historical documentation and receive accurate answers based on matching intent. Our solutions are quick, curated, and cheap to implement using our proprietary platform.

Alec Walker / aw@delfinsia.com



DV8 Energy
Calgary, Canada

For more than a decade researchers at producing companies as well as service companies have been working to develop a mathematical model of the dynamics in deviated and horizontal rod pumped wells. DV8 Energy is the only company that has successfully solved this valuable problem. DV8's technology increases pump and rod string life, reduces workovers, saves energy and maximizes production. The reduction in workovers, and well site visits, also reduces the number of workovers and wellsite related safety incidents. DV8 is currently working on taking its mathematical toolbox to the world of rod string design, which will offer further benefits to producers of deviated and horizontal rod pumped wells.

Dermot Lyons / luke.beaudry@dv8energy.com



ecoSPEARS

Altamonte Springs, Florida

At ecoSPEARS, we know that people around the world are affected by toxic chemicals in their water. When these toxins are not removed from the environment, they can cause birth defects and diseases, including cancer. Through our clean water technologies and solutions, people are able to live better and healthier lives because we are able to permanently remove these toxins from their environment. ecoSPEARS provide the best solution to remove toxins because everyone deserves access to clean water, clean food, and clean air.

www.ecospears.com

Ian Dormal / ian@ecospears.com



Edge Geoscience Inc.

Edge Geoscience

Houston, Texas

Edge Geoscience Inc. is a Houston-based company with mission to significantly reduce the operational costs and increase the efficiency by performing static and dynamic data analyses in small-to-massive scale. Using our developed platform, unlimited number of wells can be connected, analyzed and monitored via one single platform. Additionally, we have applied our patent pending geomechanical algorithm to estimate the in-situ stresses while logging, without having to perform additional field scale tests. Our proposed platform is also equipped with over 40 essential engineering interpretations to address small to medium-size companies' engineering and monitoring needs.

www.egigroups.com

Vahid Serajian / vserajian@egigroups.com



Engage Mobilize

Denver, Colorado

ENGAGE is a digital field management platform that is revolutionizing the way oil and gas companies interact with service providers. The platform interfaces with both operators and vendors, allowing complete transparency for all sides. ENGAGE is the industry preferred solution to digitizing the oilfield and works with all service types in any operation. The solution digitally mirrors intricate workflows in the field, making it easy to adopt, while keeping a big picture, data driven approach that is paramount from an executive perspective. By integrating with other software, ENGAGE can preload pertinent information, predictively schedule repeatable services and streamline ticket information into accounting systems. After realizing successful results, ENGAGE clients are moving to rapidly expand the solution to other active basins. Case studies show a dramatic reduction in costs and increased productivity, all while saving precious time for clients.

<https://engagemobilize.com>

Rob Ratchinsky / Rob@engage-m.com



Equipcast

Houston, Texas

Equipcast is the first solution applying prognostic operation models. Like a patient tells a doctor. The equipment communicates its issues enabling the system to compare the entire health of the equipment in the asset vs their technical limits. Thus, changing the operating value chain. Allowing operators to focus their attention from thousands or hundreds of wells and sensors, to a problematic few. Lowering overall OPEX for their assets.

www.equipcast.com

Sergio Tuberquia / sergio.tuberquia@equipcast.com



FLITE Material Sciences

Somerville, Massachusetts

FLITE has a technique for modifying the surface of different materials to give them extraordinary properties without toxic and temporary coatings. Without changing the basic properties of glass, metal, plastics and ceramics, we can make surfaces repel or attract water or oily substances. The resulting effect is both permanent and durable. The potential benefits for any pipeline include reduction of scale, improved flow, and reduced corrosion. FLITE was created to bring these new techniques out of the lab and into commercial use at industrial scale. Our early customers include leaders in aviation, military applications, medical, food and beverage, and space industries. We are graduates of the CENTECH accelerator in Canada and Techstars Air Force in Boston.

www.flite.tech

Dan Cohen / dan.cohen@flite.tech



Flutura Decision Sciences and Analytics

Houston, Texas

Flutura is a pioneering product company providing Artificial Intelligence Solutions for IIOT (Industrial Internet of Things) use cases. Aimed at improving two core business objectives of "Equipment Uptime" and "Operational Efficiency". Our product "Cerebra", powers many connected assets and connected operations use cases across the O&G value chain, Process Manufacturing, & Heavy machinery industries. Flutura's Cerebra is trusted by global giants such as Shell, Honeywell, Henkel, TechnipFMC, Patterson UTI, ABB, BJ Services, Daimler Benz, etc. It offers unique features integrating physics, heuristics & data-science based learning models helping our customers generate actionable insights. Flutura's Cerebra among the few products named in the prestigious IIOT Magic Quadrant published by Gartner, and was ranked #1 by customers in the Gartner Peer Insights Voice of Customer: Industrial IOT Platform. Flutura is backed by industry-leading Venture Investors. Vertex Ventures (member of Temasek Holdings \$200Mn+ Singapore fund), The Hive (Palo Alto,CA) and Lumis Partners (Stanford,CT).

www.flutura.com

Krishnan Raman / krishnan@flutura.com

**FRONTIER DEEPWATER
APPRAISAL SOLUTIONS**
The Next Step in Deepwater –
Innovating with Proven Solutions

Frontier Deepwater Appraisal Solutions

Houston, Texas

Frontier Deepwater is licensing its patented movable wellbay technology. Adopting Frontier's solution for just one oil field will mean billions of dollars in savings and ENPV for our licensee. This innovation dramatically increases reserves recovery and reduces the cost per barrel by enabling surface BOP drilling/completion operations and supporting dual barrier dry-tree production risers at the core of a permanently moored Floating Drilling/Producing System (FDPS). While each FDPS is designed for long life, low cost and rapid deployment allow early sanction/deployment for appraisal of huge, complex reservoirs as production provides critical reservoir performance data.

www.FrontierDeepwater.com

Chuck White / Chuck.White@FrontierDeepwater.com



Genesis Systems

Kansas City, Missouri

Genesis Systems® is a water technology company that has developed a portfolio of cutting-edge technologies to address global freshwater scarcity. Genesis Systems® generates pure freshwater from the air using the most advanced integrated technologies ever applied to water sequestration. Technology coupled with work from our partners, including the United States Air Force, Google, BitBox USA, and Siemens. Combined, Genesis technologies can transform businesses, industry, government, and agriculture by reducing electrical power requirements and increasing freshwater availability when and where needed.

<https://genesissystems.global>

David Stuckenberg / d.stuckenberg@genesissystems.global



H2Sweet

Calgary, Canada

H2Sweet Inc. is offering Sulfcats[®] its innovative sweetening process to sweeten natural gas, to its worldwide clients. This regenerative sweetening technology can be used for a wide range of applications within oil and gas. The iron-redox sweetening process has been available to the energy industry for many years but, our proprietary Sulfcats[®] reagent provides superior performance when compared to previously developed chemistry and treatment methods. H2Sweet's advanced, regenerative, process is a ground-breaking suite of technologies that remove H₂S in a novel, cost-effective and efficient method. The Sulfcats[®] technology has been developed to eliminate hydrogen sulfide (H₂S), a major contaminant in many industrial applications. The process uses a regenerative reagent, drastically improving ESG, reducing chemical treatment costs and improving operations excellence.

www.h2sweet.ca

Dorn Cassidy / dcassidy@h2sweet.ca



Harber Coatings

Calgary, Canada

Harber Coatings' high performance electroless nickel coating process has been developed specifically for tough industrial applications where severe corrosion and abrasion exist. In oil and gas industries it has been successfully used in off shore and sour, corrosive applications. The process is unique in the world. The company's technology is absolutely leading the globe in coating performance, production scale, and green production. Our existing coating equipment can handle 45 ft long parts, and our technology is capable to handle much bigger parts.

www.harbercoatings.com

Ken Wang / ken.wang@harbercoatings.com



HyBird

London, United Kingdom

Problem worth solving... Globally, the industrial asset management market is est. \$50B annually. Data collection is labor-intensive & results in the creation of new silos, with limited real-time preventative insights for engineers and managers. As a result, costly site defects are often left unresolved for months or even years. HyBird's Solution Using AI and machine vision, HyBird's Clarity software platform creates 3D digital models of assets with industry-standard visual data inputs. Disparate asset inspection owners can now jointly manage their data, removing 80% of typical labor needs & automatically identify defects and the failing components.

Ahmed Hadid / ahmed@hybirdtech.com



iCPRs

Lewes, Delaware

Offers a Family of the following 4.0 Technologies called MIIIS444.0 to Address 4.0 Key Challenges of the Oil and Gas Industry 4.0 Digitalization. 1. Digital Fluid PhysicsTM 2. PetroPixAITM: Intelligent Multiscale Rock Physics 3. Dynamic Physics Intelligent Reservoir Surveillance SystemTM 4. Cognitive Intelligent Virtual Assistant TM MIIIS444.0 is the iCPRs's Smart Solution for E&P Digitalization and stands for Multiphysics Informed Integrated and Intelligent System.

www.icprslc.com

Shahin Negahban / Shahin.Negahban@icprslc.com



Intrida
Houston, Texas

Engineering and technical projects struggle and spends an enormous amount of resources in validating the quality of their technical data, as well as communicating this to all stakeholders. We at Intrida are a group of engineers researching and developing a next generation data integration platform which enables the rapid visualization, validation and collaboration on disparate technical datasets (1D, 2D and 3D data) within the energy/process industries, to yield savings in time, cost and improve efficiency.

www.intrida.com
Henry Uyeme / henry@intrida.com



Jujotech
Boulder, Colorado

Jujotech is a software development company based in Boulder, Colorado. Jujotech has a strong leadership and development Team. The company solutions are created for smart headsets (Hands Free Operation), targeting Industrial, Manufacturing, Enterprise, and Embedded Intelligence (IoT) applications. Jujotech offers leading solutions for remote assist, industrial augmented reality (with IoT Analytics Ingestion), and workflow with open API. Supported devices include smart headsets (hands-free operation), tablets and smartphones. Jujotech solutions produce instant & substantial gains in productivity by bringing actionable digital content to the edge (in real-time). The company currently offers its solutions in North America and Europe.

www.jujotech.com
Antonio Gentile / antonio.gentile@jujotech.com



Jupiter Intelligence
San Mateo, California

Jupiter Intelligence products help our customers make informed decisions that safeguard at risk infrastructure around the world, with the industry's first quantifiable climate driven analysis for flood, fire, heat, drought, cold, wind, and hail events.

<https://jupiterintel.com>
Robert Limp / robert.limp@jupiterintel.com



Katz Water Technologies
Houston, Texas

Katz Water Technologies will enable oil producers to reduce produced water disposal costs with a patented thermal distillation system that purifies and recycle produced water onsite using available well site gas including waste flare gas. We have created this revolutionary process by modifying heat exchangers to internally distill and separate pure water from contaminated water using the existing heat energy in the system. We have demonstrated the technology can purify significant amounts of produced water using flare gas at the wellsite and have started selling to oil and gas producers. In Texas, the amount of gas that is flared and vented can annually purify billions of gallons of water saving oil producers hundreds of millions of dollars in disposal costs while providing a renewable source of pure water for industry, farmers & municipalities & reduce the need for disposal wells.

www.katzwatertech.com
Gary Katz / gary@katzwater.com



Lumin

Charlottesville, Virginia

Lumin is an energy platform that turns homes into personal electric microgrids by managing on-site solar, energy storage, smart home devices and energy consumption. For the foundation technology, we figured out how to make any old-fashioned circuit breaker panel smart in less than 3 hours, in a similar way Nest did for the thermostat space but only for the entire house. Lumin is selling it's product through partnerships with Tesla and Sonnen plus its own network of over 100 solar installers that comprise some of the major solar+storage companies.

Alex Bazhinov / alex@luminsmart.com



MemComputing Inc.

MemComputing

San Diego, California

MemComputing is working with companies in Oil & Gas and Clean Energy on solving computational problems that cannot be solved optimally today. MemComputing has demonstrated the ability to save its client companies \$10s of millions of dollars monthly by providing optimal solutions to large scale extremely complex problems. Each of these problems is under NDA so it is not possible to share the exact problems. However, our focus is on problems related to the scheduling and routing of resources and personnel. We hope that by the time of the event we will have permission to share the public aspects of these projects while not revealing any proprietary techniques or information used by our clients.

<http://memcpu.com>

John Beane / jbeane@memcpu.com



MyPass Global

Houston, Texas

MyPass MyPass is a cloud based workforce management system centered around a digital work skills passport, designed to help companies in highly regulated industries to reduce their risk and cost of operations. The key difference with MyPass is that workers own and control the data contained within their MyPass digital work passport, connecting them directly with Training Institutions, Employers and Operators, without the need for manual data entry. Our aim is to become the 'industry standard' for workforce compliance management in the Global Energy sector. We are building advocacy at all levels of the supply chain (Operators, Service Companies, Workers and Training Organizations) as an industry-endorsed 'single source of truth' platform. This has created a strong network effect of referrals, which now includes an ecosystem of over 180 business partners across Australia, New Zealand & the USA including more than 27,000 registered workers.

<http://mypassglobal.com>

Matt Smith / msmith@mypassglobal.com



NatGasHub.com

Houston, Texas

NatGasHub.com built a technology that consolidates over a 150 different natural gas pipeline websites into one by allowing our customers to submit their natural gas nominations on one site and replacing the time-consuming process of visiting numerous separate pipeline websites. An analogy would be Netflix versus Blockbuster where Netflix built one centralized portal for multiple viewers to access entertainment from multiple sources (many-to-many). Over \$100 million worth of natural gas transactions are now executed using our software. Major Fortune 500 companies have signed up as subscribers to use our SaaS software.

www.natgashub.com

Jay Bhatti / jay.bhatti@natgashub.com



Nesh
Houston, Texas

We have reimagined how Oil and Gas Software should be and created Nesh. Nesh is the Smart Assistant for Oil and Gas. Nesh is a conversational AI that can organize and manage all the technical knowledge within an organization so that users can make better and faster decisions by talking to all of their data. Imagine if Siri or Alexa went to school, got an advanced degree in Petroleum Engineering and Geoscience, then went to work in the Oilfield, attended technical conferences, read journals and books; you would have Nesh. Nesh runs on any browser. Users can simply ask, and she will answer their complex technical questions, in a conversational way. Nesh does away with the complexity of traditional Oilfield software by combining high-fidelity science with Natural Language Processing and other Machine Learning Techniques to create a simple, interactive and enjoyable experience.

<https://hellonesh.io>

Sidd Gupta / sidd@hellonesh.io



Nomad Proppant Services
Houston, Texas

At Nomad, we aim to change the way E&Ps think about sand and how it's delivered to location. Our mobile mine is designed to put the plant as close to the well as the deposit allows. Then, we will build a stockpile for the entire well's sand requirements two weeks in advance. Finally, 24 hours prior to the job beginning, we will slurry the sand to our patent pending de-watering bins where the then 95% dry sand will be conveyed into the blender.

www.nomadproppant.com

Steve Brock / Steve.Brock@nomadproppant.com



Nubix
Denver, Colorado

Nubix makes IoT applications easy, modernizing development processes to decrease time-to-market, increase agility, and optimize business value of IoT initiatives. Gaps in IoT developer skills and lifecycle are addressed via cloud concepts -- containers for agility, pre-packaged services for re-usability, and high-level languages for faster development. Pilot customers include two international industrial equipment manufacturers and an O&G customer. Nubix is a SaaS company with three potential revenue streams: - MRR for developer seats; - MRR for device management; and - licensing fees for embedded components on edge devices. Nubix's executives are Silicon Valley veterans with prior start-up success and experience managing large operations.

<http://nubix.io>

Rachel Taylor / rachel@nubix.io



Onboard Dynamics
Bend, Oregon

We have developed innovative natural gas compression technology allowing a low-pressure natural gas source to be compressed within an engine platform that runs on natural gas to compress natural gas without the need for electricity. This approach provides critical, smaller and more flexible compression solutions for use in the natural gas and renewable natural gas (RNG) industries related to transportation and pipeline maintenance. In addition, we are expanding our core technology to include natural gas cleanup and conditioning functionality with the current compression for a single technology that can capture stranded gas and smaller agricultural renewable natural gas generation opportunities.

<https://onboarddynamics.com>

Rita Hansen / rita.hansen@onboarddynamics.com

OperAid

Operaid Software
Portland, Texas

Human error causes 80% of catastrophic industrial accidents. Existing Process Safety compliance techniques are obsolete manual and expensive processes. Presently, to ensure compliance Management depend on:

- Competence of Technicians without consideration of Human factors
- Random field audits by frontline Supervisors mostly after tasks are completed
- Process Safety Analysts who attempt to detect safety threats using lagging operational data.

We're transforming Process Safety regulations into mobile apps that identify field equipment using IoT sensors or computer vision. This real-time verification of work, maps process anomalies against human behavioral factors and operational compliance.

www.operaidsoft.com

Neil Beekie / neil@operaidsoft.com

ORIGENAI

Origen.AI
Brooklyn, New York

OriGen.AI is an artificial intelligence (AI) company developing solutions for fast and accurate prediction of dynamic behavior for all types of reservoirs and development problems, including CO2 sequestration and EOR. Our solutions are based on our physics-based AI methods, which can solve differential equations thousands of times faster than state-of-the-art software. By enabling real-time simulation, our AI-based models allow for fast optimization of field development plans and oil field operations. Our solutions are built on cutting edge reinforcement learning algorithms and generative adversarial networks (GANs) for the generation of plausible geological models with limited amount of information and based on geological knowledge. OriGen.AI is the first platform in the upstream industry with a complete solution for close-loop optimization in real time.

<http://origen.ai>

Ruben Rodriguez Torrado / rubentorrado@origen.ai

OSPERITY

Osperity
Houston, Texas

With more than 40 industrial customers, Osperity uses AI-assisted Computer Vision to manage by Exception, resulting in:

- Major cost reductions in the field – ranging from 50% to 200% ROI
- Substantial decrease in carbon footprint by eliminating truck rolls -- 50% reduction for most customers
- Remarkable protection of assets from theft – in some cases a 100% reduction
- Vast improvements in safety, compliance, and environmental protocols

As such, the Osperity Technology Platform:

- Captures massive amounts of data, from any number of video sensors
- Analyzes the data with Computer Vision, a specialized type of Artificial Intelligence
- Delivers personalized and actionable alerts via exceptions-based management
- Specific and new applications are developed and taught via machine learning
- Intelligent Visual Data is an Automation Catalyst
- Works on Legacy Equipment
- Connects to existing SCADA systems
- Via cellular, satellite, LTE connection
- Access from anywhere in the world.

www.osperity.com

Scott Crist / scrist@osperity.com

ouro negro

Ouro Negro
Rio de Janeiro, Brazil

Ouro Negro is a Hard Tech Company focused on the development and commercialization of innovative solutions for the E&P sector of the Oil&Gas industry, including asset integrity management, combining structural health monitoring with robots for integrity inspection, intelligent completion and well intervention systems.

<http://ouronegro.com.br/en>

Eduardo Costa / eduardo.costa@ouronegro.com.br



Pandata Tech
Houston, Texas

Pandata Tech specializes in AI and ML data quality solutions for businesses processing a high-volume of time-series data from sensors. Our value is in drastically reducing the amount of time data professionals spend cleaning and validating sensory data. Our solution is agnostic, plugging into a company's existing infrastructure, and enables clients to flag, tag, label, and validate every time-series at scale with a quality score between 0-100. By giving data professionals up to 80% of their time back and making output data more reliable for algorithms, they can make data-driven decisions, and focus on future digital processes like maintenance, optimization, and automation.

<http://pandatatech.com>

Gustavo Sanchez / Gustavo@pandatatech.com



Perceptive Sensor Technologies
Tucson, Arizona

PST provides the petrochemical industry with actionable real-time critical data on fluids throughout production and logistics processes - including fluid identification (acoustic fingerprint), material flow by volume and weight, fill level, product quality and software analytics in real-time with non-intrusive technology. Our patented acoustic fingerprint technology can identify fluids non-intrusively. No other product on the market can perform this function from the outside of metal pipes and tanks. The strong accuracy of the technology can determine the difference in octanes, as well as the differences in brands of motor oils or if the quality has deteriorated. Our strategy is to use our core technology as a platform for a variety of applications including manifest verification, monitoring conditions of liquids, product movement and flow rates, inventory control, process optimization and asset utilization.

www.perceptivesensors.com

John Schlitt / jheim@perceptivesensors.com



PetroPixAI
Lewes, Delaware

"PetroPixAI Inc.", a sister company of iCPRs Inc. is focused purely on developing Intelligent Multiscale Rock Physics™ technology, a probabilistic hybrid Deep Learning and IoT Based Computer Vision System for "fast track rock characterization at the well site" and smart multi-scale reservoir evaluation. This technology adds significant value to the traditional subsurface characterization. This technology can be also applied to medical image processing especially in Pathology. It helps operators to save hundreds of million dollars cost reduction through smart reservoir evaluation based on the following: • providing a cloud-based fast and unbiased multi-scale smart image processor of subsurface images (from microscale to seismic) (Figure 1). • providing an Augmented Reality Glass Coupled with cognitive technology (Figure 2) enabler that will provide our customers with immediate segmented core images at the core viewing room with statistics of lithology and saturation changes. • Integration of multi-scale measurements into digital platforms.

Masoud Kalantari / Masoud.kalantari@icprslc.com



PhDsoft Technology
Houston, Texas

PhDsoft is an engineering technology company creator of PhDC4D®, 4D software that focuses on structures, static equipment and piping, providing a smooth and safe digital transformation of the inspection, operational and maintenance process. Data efficiently flows from critical assets to our PhDC4D® Predictive Digital Twin to provide crystal clear awareness of the aging process and associated risks over time. PhDsoft solution significantly reduces operational and maintenance costs, provides accurate bill of material information for budgeting, prioritizes areas for inspection, mitigates risks such as accidents and failures, reduces downtime and brings significant competitive advantages.

www.phdsoft.com

Rosana Ellis / rosana.ellis@phdsoft.com



Pluto Ground Technologies
Calgary, Alberta, Canada

Headquartered in Calgary with offices in Istanbul and Dubai, Pluto manufactures and provides engineering support for SmartSet®: a thermo-setting technology for well integrity, drilling efficiency and production enhancement challenges. Patented in the U.S., Canada & Europe, SmartSet® is a formulation of environmentally friendly, inorganic powders that when mixed with water provide a controlled right-angle set with rapid compressive strength generation downhole. Time from mixing the thin slurry to the right-angle set is engineered within minutes with zero gel strength generation between fluid and set states. SmartSet® has the shortest transition time in industry and expands slightly when setting, making it ideal for applications including gas & water shutoff and lost circulation. SmartSet® can be pumped through the bit and drilled out in 1-2 hours, saving significant rig time & OPEX. SmartSet® helps to abandon wells leaking gas more effectively, efficiently & sustainably, thereby contributing to reduced GHG emissions.

www.plutoqt.com

Philip Tomlinson / philiptomlinson@plutoqt.com



PrioriAnalytica
Adelaide, Australia

PrioriAnalytica provides systems that use advanced analytics and machine learning algorithms to diagnose your operational problems, affecting your business, with enough lead time to facilitate remedial actions, avoid downtime or failure, and to optimize your operations. Our approach is unique; by using our extensive oil and gas industry experience, we can rapidly identify and isolate only those data streams and systems relevant to a problem. We can, therefore, provide a solution in a fraction of the time usually taken to develop via a platform-based or 'big data' approach. Our solutions work within a company's existing operational processes, utilizing existing applications, data-streams, and information. As an example of the impact we can have, the team at Priori has delivered analytics systems generating confirmed benefits in increased production of \$8.5 million p.a., facilitated significant Opex reductions in the order of \$3.5 mill p.a. and improving EHS performance for a single asset.

www.priorianalytica.com

Steven Benn / steven.benn@priorianalytica.com



Quidnet Energy
Houston, Texas

Long-duration electricity storage is the next frontier in the energy transition and a \$T global white-space. Quidnet Energy stores energy as pressurized water underground to unlock a step-change in deployment economics and catalyze an immense growth market for traditional subsurface players.

www.quidnetenergy.com

Joe Zhou / jzhou@quidnetenergy.com



ResFrac Corporation
Palo Alto, California

ResFrac is a full physics simulator that empowers users to simulate the entire life cycle of a hydraulically fractured well in a single coupled model: fracture propagation, reservoir flow, and geomechanics. Fracture sequencing between wells is honored. Fractures are meshed for the entire duration of the simulation, capturing the dynamics of frac hits and parent-child interactions. Users can setup and quantitatively optimize landing zone sensitivity, well spacing, parent-child relationships, refracturing, and/or EOR huff and puff schemes. ResFrac is used by small independents and super majors alike, and has been applied across every major American shale play: Permian, Eagle Ford, Bakken, SCOOP/STACK, Utica, Marcellus, Montney, and Vaca Muerte.

www.resfrac.com

Garrett Fowler / garrett@resfrac.com

**Rocsole**
Kuopio, Finland

ROCSOLE is a Finnish technology company providing real-time process insights based on our tomographic technology platform. We are now in a strong growth phase implementing our solutions for a variety of Oil & gas applications - including separators, tanks and pipelines. Our smart pigging service with deposit scanning is launched early 2020 with Equinor and Shell with two field projects in the North Sea and South East Asia. We are in a development phase for new applications covering desalters, downhole, flow assurance and drilling areas. Our sensors and software gives new possibilities for process insights and serves to enhance the process optimization decision making. Our solutions are used by more than 30 clients and our customer base is rapidly increasing. We have Shell Technology Ventures and Repsol Venturing Company as two of our equity partners. Equinor has also provided LOOP funding.

www.rocsole.com

Anssi Lehtikainen / anssi.lehtikainen@rocsole.com

**Sabre Autonomous Solutions**
Revesby, Australia

The approach to abrasive blasting for corrosion maintenance has changed very little since the Industrial Revolution of the early 20th Century. Today we stand at the doorstep of "Industry 4.0", yet we still put workers in danger, while the underlying fact remains that humans don't actually belong in confined and dangerous spaces for any reason. There needs to be a better way. As rapid technological change continues to emerge on a steeper and steeper curve, we at Sabre believe that the time for dramatic change in corrosion management processes is now. We believe we need the process to be faster, and to yield more consistent results. Most of all, we believe that technology should ensure that every worker returns home to their family as safe as they were when they left for work, and that every asset be returned to service on time and in a cost effective manner.

Anthony Schiavo / anthony@sabreus.com

**Senslytics**
Peachtree Corners, Georgia

Built on proprietary Intuition Technology platform, Senslytics has developed Sixth Sense Suite which is a new generation industry-grade advanced AI application that can produce relevance aware Forewarning alerts significantly ahead of classical predictive tools. The alerts can be delivered to the mobile devices or other desired destinations e.g., dashboard or existing applications. The Intuition Models are built on "Intuitive Scientific Learning" as opposed to "Machine Learning" making the models much less data-hungry, a feature that is very helpful for O&G vertical where data is limited and considered costly assets. The uniqueness of our solution comes from harnessing intelligence from surroundings and situational changes. This innovation so far has resulted in four US Patents 10,061,833 and 10,073,724, 10,443,966, 10,445,163 and several more in pending status. Senslytics won the Shell GameChanger funding last year and has delivered real-time contamination Forewarning Application for fluid samples collected during Wireline Formation Testing (WFT) operations.

www.senslytics.com

Rabi Chakraborty / rabi.chakraborty@senslytics.com

**Sky Canoe**
Toronto, Canada

SKY CANOE is a Canadian company with patent pending on the world's most advanced unmanned cargo aircraft. Our unique design includes a new approach to VTOL with our Sequential Vectoring Thrust®, innovative micro-infrastructure and a UTIS designed around FAA regulations. In addition to engineering innovation, our work has a special focus on reducing emissions, safety and regulatory compliance. Sky Canoe will use only clean technologies and aims to be the world's first Zero Carbon emission cargo freight UAV. Sky Canoe offers customers a safer, less expensive and cleaner way to move cargo to hard to reach locations.

Jason Dudek / jasonadudek@skycanoe.ca



SOTAOG
Houston, Texas

We organize and intelligently analyze the interdependencies of millions of data points from machines + relevant static data at the stroke of a button. We do this by leveraging cutting edge IIOT backend to seamlessly integrate/process real time data (Sotaog's proprietary algorithms) from sensors, perform Edge computing and push the data serverless Cloud to drive Predictive analytics (also Sotaog's proprietary algorithms) for operation efficiencies

Sarah Tamilarasan / sarah@sotaog.com



Syzygy Plasmonics
Houston, Texas

Syzygy is developing a new type of photocatalytic reactor that is powered by high-efficiency LED's and used for high-throughput, single pass chemical reactions. This platform technology has been applied to a number of reactions including steam methane reforming, ammonia decomposition, and dry methane reforming. This technology will help to electrify the chemical manufacturing industry and reduce its reliance on fossil fuel. Syzygy's first go to market reactions will focus on producing low-cost, low-emission hydrogen to help enable the growing fuel cell vehicle industry as well as a number of other industrial suppliers.

www.plasmonics.tech
Trevor Best / trevor@plasmonics.tech

Teratonix
Ambient Energy Harvesting

Teratonix
Pittsburgh, Pennsylvania

Teratonix commercializes radio-frequency (RF) energy harvesting technology, which was invented at Carnegie Mellon University and has distinctive advantages in high efficiency (100+x higher) and broadband capability (100MHz-100GHz). Our harvester product, released at Consumer Electronics Show 2020, can generate electricity from ambient broadcasting cellular & Wi-Fi signals to recharge/replace battery, and thus provide a clean, batteryless, maintenance-free, wireless powering solution to enable the deployment of billions of IoT sensors. We are currently focusing on industrial IoT applications for oil & gas sector in monitoring environment, tracking asset/equipment and predictive maintenance, while also actively exploring opportunity in Bluetooth-enabled IoT sensors for smart homes/cities.

www.terradepth.com
Johnny Huang / johnnyhuang@teratonix.com



Terradepth
Austin, Texas

Terradepth is a highly sophisticated data-as-a-service company whose mission is to increase ocean knowledge through autonomous, high resolution, scalable data collection. We provide access to a broad ocean data repository through a beautifully designed user interface. Because Terradepth completely removes humans from offshore data collection operations, our products and services are provided at the industry's lowest cost without sacrificing quality. Terradepth serves any organization, industry, or individual who cares deeply about making responsible decisions about the world's ocean. Our patent-pending ocean data collection methodology democratizes ocean data and provides a remarkable level of data visualization and interaction. Terradepth's technology drastically lowers the cost of deep ocean data, opening access to earth's last frontier to support exploration, research, and conservation. Terradepth designs and builds using a holistic perspective, leveraging the latest advancements in hardware, software, and data science to provide the world's first deep ocean data-as-a-service business.

www.terradepth.com
Judson Kauffman / judson@terradepth.com

**Troposphere Monitoring**

Austin, Texas

Troposphere enables oil and gas producers & landfill managers to quickly, remotely, and affordably identify methane leaks. Their stationary sensors are installed on site and measure weather and hydrocarbon concentrations, and their software remotely and automatically converts measurements into emission rates, site-specific emission maps, and actionable repair recommendations. Founded by a group of PhDs who met at Johns Hopkins University, field pilots began in September and the company has closed 2 contracts for paid pilots with market leaders. They are currently piloting our devices.

www.troposphe.reAnna Scott / anna@tropospheremonitoring.com**Utility Global**

Provo, Utah

Our mission is to reshape the world's energy landscape the same way the silicon micro-chip reshaped the electronics industry and every one of our lives. We've developed the world's fastest and lowest cost manufacturing technique for making solid-oxide fuel cells. Our high-throughput manufacturing innovation is making fuel cells more than 1,000 times faster than our nearest known competitor and targeting a cost reduction of greater than 99%. Not only are our cells targeting a 100x cost reduction vs. our top competitors, but we're also targeting more than a 100x increase in energy density, truly bringing miniaturized power to the masses. These "Oxide Ion Chips" can be used to make 1) Low-cost, green hydrogen; 2) Zero-carbon liquid fuels; and 3) Low-cost, zero-carbon, natural-gas-powered electricity.

<https://utility.global>Matthew Dawson / mdawson@utility.global**Vita Inclinata Technologies**

Broomfield, Colorado

Vita Inclinata develops the Load Stability System or LSS. The LSS autonomously stabilizes loads during crane operations to eliminate the rotation and swing that loads experience. The LSS then provides precise load placement through a control pendant to ensure a hands-free approach during lifting operations. The LSS was developed to ensure safer working conditions, ensuring that we bring people home every time.

www.vitatech.coKelsey Abernathy / kelsey@vitatech.co**Voyager**

Houston, Texas

Voyager supports any company with complex marine supply chains. Whether its its transporting crude oil and LNG or complex offshore rig movements. Using Voyager, entire networks can project manage voyages and execute workflows in a common shared environment. As data is transferred between parties Voyager runs predictions, forecasts and analysis to support daily and long term planning decisions.

Matthew Costello / matt@voyagerportal.com

**Wave9 Technology**

Regina, Canada

Oil & Gas producers are facing economic headwinds, price pressure, and increased demands for social and environmental responsibility. Wave enables conventional oil producers to reduce operating expenses, improve their environmental footprint, and recover lost production by shifting inspection and operations workflows from the traditional daily run to a process of management by exception and predictive maintenance. Many other monitoring systems require operators/pumpers to analyze graphs, review hundreds of photos, and are difficult to integrate with internal systems. By contrast, Wave9 automatically analyzes data, including photos, and draws field staff's attention only to sites that need work. This simplifies adoption and provides a great experience. We also integrate with other data systems easily through typical standards.

<https://wave9.co>Ian Cunningham / ian@wave9.co**WellNoz**

Houston, Texas

WellNoz makes inflow control devices (ICD) for the oil and gas industry. ICDs are downhole devices that are shut and open up to let hydrocarbons flow into a well. Conventional ICDs are usually mechanically actuated. The oil company must deploy a downhole tool to open up the valve, adding time, cost and complexity. WellNoz uses a proprietary metal alloy that remains strong to remain closed when required, and then dissolves after a certain time to open up the valve, saving time and cost. Our first product is for a single Middle East customer - Abu Dhabi National Oil Company. They will purchase 10,000 a year for the next 5 years, an addressable market of \$20 million a year. There is only one other competitor. Margins range from 30-60% and the market can expand to \$50 million a year, generally in the Middle East, even in today's low oil price environment.

Indranil Roy / iroy@wellnoz.com**W • S E N S E**

INTEGRATED CABLELESS SOLUTIONS

Wsense

Rome, Italy

WSENSE is a high-tech Italian company with a strong and experienced R&D team specialized in monitoring and communication systems, with pioneering patented solutions on the Internet of Underwater Things (IoUT). Our cableless patented technologies are at the forefront of underwater wireless networking, outclassing competitors at 20+ at sea campaigns with a demonstration of their performance and reliability. We support multi-modal underwater wireless communications (e.g, acoustical, wireless optical, RF), mesh networking and secure communications among multi-vendor underwater and surface sensing and robotic platforms. What we offer is complete IoUT solutions, interconnecting and adding value and intelligence to assets our customers have already invested in. Full support to multi-vendor interoperability is at the core of our solutions.

www.wsense.itChiara Petrioli / chiara.petrioli@wsense.it