

50 RISING STARS 2021



Geospatial industry today craves the infusion of youth into its ranks.

The young professionals that represent Millennial and Generation Z voices.

The bright young minds that help reimagine geospatial in a complex digital environment.

Young leaders that represent our industry's future.

The Geospatial World 50 Rising Stars is an initiative by Geospatial Media and Communications to highlight the outstanding accomplishments of young individuals who are proactive and passionate about the value of geospatial technology to the economy and society. Selected from a list of over 250 high-quality nominations from the community, the Geospatial World board of editors agreed that these 50 candidates stand out at the top of their class and are well on their way to redefining the next generation geospatial leadership.

Here's the list of 50 Rising Stars to look out for in 2021

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Aimee Barciauskas

Earth Data Team Lead
Development Seed, USA

Aimee works on multiple projects with NASA to expose their vast archives of Earth Observation data and make it usable to scientists via open science platforms. She supported the NASA Space Apps Covid Challenge by putting up a number of great datasets as Cloud Optimized GeoTIFF's on the AWS Registry of Open Data. Currently, as a technical lead on the data system for the Multi-Mission Algorithm and Analysis Platform (MAAP), she manages a NASA cloud platform and data store to support biomass research on an open science platform.



Alexander Gunkel

Founder & CEO
Space4Good, The Netherlands

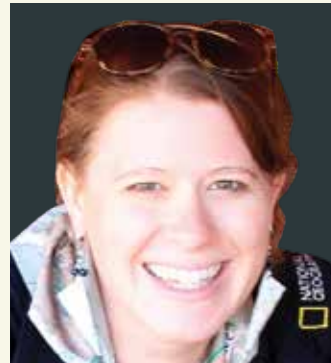
Alexander founded Space4Good, where he works with his team on regenerative agroforestry platforms, environmental crimes predictions, post-conflict ammunition detection, precision-agriculture services, disaster management systems, and other geospatial applications to improve life on Earth. Prior to Space4Good, Alexander co-founded his first venture, Skytree, which is working on a CO2 recycling system originating from the International Space Station (ISS).



Alexandra Fredericks

LiDAR Coordinator/Associate Geospatial Liaison
US Geological Survey, USA

Alexandra (Xan) works with the US Geological Survey (USGS) as the Associate National Map Liaison to Florida, Puerto Rico, and the US Virgin Islands for the National Geospatial Program and as the LiDAR Coordinator for the Coastal and Marine Hazards and Resources Program. She strives to help people, from USGS scientists and the Nation's residents, to a variety of Federal, State, and local agencies, discover and coordinate geospatial data to empower location intelligence through outreach, collaboration, analysis, and data visualization.



Alison DeGraff Ollivierre

Cartographer
National Geographic Maps, USA

Alison (Aly) works full time as a Cartographer for National Geographic Maps, focusing on developing their Trails Illustrated topographic outdoor recreation map products. In her free time, she conducts freelance cartography work as Tombolo Maps & Design, works part-time as a Senior Cartographer for BirdsCaribbean, and serves on the Executive Board of the International Society for Participatory Mapping. She has authored a number of publications primarily focused on participatory mapping and geomorphology.



Anita Graser

Scientist
Austrian Institute of Technology, Austria

Anita is a spatial data scientist, open source advocate, and author. Her research interests and expertise include: algorithms and systems for spatial data analysis and visualization, specializing on mobility/transport movement data analysis. Anita has authored several popular books about QGIS, the most widely adopted desktop open source GIS. She is the developer of MovingPandas, a Python library for movement data analysis, member of the QGIS project steering committee, and winner of the Sol Katz Award 2020.



Annina Koskiola

Co-Founder & CEO
Proximi.io, Finland

Annina is an archeologist and museum exhibition curator by education, who got pulled into the field through her Master's thesis research on museums and mobile applications. She co-founded Proximi.io in April 2014. Proximi.io is the first unified positioning platform, which bundles all mobile positioning technologies and related functionality under one SDK, to be easily integrated into any application. Their versatile technology is used in locating and guiding people indoors and outdoors.



Benjamin D'Incau

Senior Data Scientist
Procter & Gamble, Switzerland

Benjamin leads the development of P&G's proprietary Location Analytics and Business Intelligence algorithms (Neighborhood Analytics) used across the globe. The algorithm blends geographic data with business knowledge and insights to reveal the relationship of location to people, events, transactions, facilities and assets. For the past 3 years, Benjamin has been developing tools and driving adoption of processes that optimize P&G sales and marketing, leading to significant value creation for the company over 2019-2020.



Callum Smith

Senior Consultant
EY Analytics, New Zealand

Callum recently began a new role at EY, working hard to identify opportunities for clients that leverage and integrate GIS and Data Science principles. Before moving to EY, Callum was with an engineering design consultancy, where he championed the increase uptake of GIS on major infrastructure transport projects in New Zealand. During this time, he successfully developed a Covid-19 Essential Supplies Delivery Management App for the local NZ Iwi partners of the Manawatu Highway Upgrade Project.



Christin Walter

Strategic Foresight Specialist
Ordnance Survey, UK

Christin managed, researched and wrote the 3rd United Nations report on “Future Trends in Geospatial Information Management: the five to ten year vision”. This involved her reaching out to a big international audience (government, academia, business, civil society and individuals across all UN nations), collecting their thoughts, running workshops, analyzing findings and drafting the document. The Report was endorsed by the international community in September 2020, soon after becoming influential, globally.



Claire Owen

Co-Founder & CTO
DronePrep, UK

Claire co-founded DronePrep in early 2020. To date, DronePrep has delivered a number of pioneering projects in the UK including UK’s first medical drone delivery with the NHS in response to Covid-19 from Isle of Wight to Southampton; innovative drone air-bridge with inter-island connectivity from Cornwall to the Isles of Scilly; and UK’s first drone package deliveries on Isle of Mull in partnership with the Royal Mail, What3Words and Skyports.



Clara Mundia

Location Analytics Manager
Dalberg Research, Kenya

Clara has built a unique team of GIS specialists in Kenya. Under Clara’s guidance, the team has built what is likely Africa’s most comprehensive geospatial research database. Off this asset, Clara and the team help startups scale in the right places; businesses to understand how their markets change with different product categories; advise governments and international donors on how to build back better after Covid; how to coordinate efforts to combat youth unemployment on the continent and many others.



Cyhana Lena Williams

Program Manager
Microsoft, Norway

Cyhana co-founded the African Women in GIS, an online community for African women around the world who work, study, or are enthusiasts of geo-related fields. Before moving to Microsoft in 2020, Cyhana worked as a GIS Mapping Specialist at an FMCG company, where she created efficient delivery route maps for product distributors and managed the company’s customer geodata. During her National Service, she coordinated a Pest and Disease Management System project, which won the Fall Army Worm Tech Prize in 2018.



Eleanor Stokes

Senior Scientist and Lead of Strategic Operations
Universities Space Research Association (USRA), USA

Eleanor has been a major force in developing the methodologies and techniques used to develop and validate the dataset and early applications of NASA's Visible Infrared Imaging Radiometer Suite (VIIRS) nighttime lights product, the Black Marble. The product provides data on the dynamics of human settlements and the interactions between urban activities and our Planet's vital signs.



Elizabeth Carr

Founder & CEO
Planet Patrol CIC, UK

Elizabeth (Lizzie) founded Planet Patrol – a non-profit organization that provides the general public with a location-based app to record litter data worldwide. The app recorded locations of over 300,000 pieces of litter by over 25,000 volunteers across 82 countries, providing rich insights into the distribution of litter on the planet. The litter impact report was shared with government policy teams and public, leading to ongoing conversations to use data to shape policy relating to litter and the Extended Producer Responsibility (EPR).



Emil A. Cherrington

Research Scientist
University of Alabama, USA

Emil is a Research Scientist with the University of Alabama in Huntsville and serves as the Regional Science Coordination Lead for West Africa for NASA's SERVIR Science Coordination Office. In his current and earlier positions with SERVIR – a joint development initiative between NASA and the USAID – he has focused on helping strengthen the application of Earth observation data in developing nations. He is also an avid science communicator, and in 2019 was recognized by the NASA Marshall Space Flight Center for “taking NASA public”.



Ephraim Danford

GIS/Data Specialist
USAID Tanzania Data for Development, Tanzania

Ephraim leads the development of an online interactive GIS dashboard to visualize and track reported cases of Covid-19 in Tanzania in real-time. The dashboard provides USAID researchers, public health experts, and program personnel with a user-friendly tool to track the outbreak and to facilitate decision making and health status insight in the country for USAID Mission purpose. The dashboard reports cases at the district, regional and national level, including for all neighboring countries as well as Sudan and South Sudan.



Esther Onyekachi Moore

Country Manager
Sambus Geospatial, Nigeria

Esther managed the team at Sambus Geospatial that created the mobile application for the Nigeria Center for Disease Control that automated the recording and tracking of Covid-19 cases. Her involvement in African Women in GIS as well as Women in Geospatial gives her the opportunity to interact with and seek to groom other young women in the industry. She is at the verge of launching her own startup - TGG Consulting Group, a consulting firm which will seek to provide a platform (theGISgirl) to create GIS ideas.



Gala Camacho

Data & Analytics Consultant
UK

Gala was introduced to geospatial data working on the automation of fiber optic network design, while studying a MSc. in Mathematics. Since then, she has worked across different projects within civil infrastructure, from transportation through to utilities. Most recently she was the Head of Analytics at an Australian startup in the civic and property tech space, where she led the data and analytics strategy and implementation, and the delivery of special projects with bespoke urban analytics.



Gopika Suresh

Research Fellow, Earth Observatory of Singapore/Asian School of the Environment, Nanyang Technological University, Singapore

Gopika focuses her research on improving methods and developing algorithms to monitor and map coastline changes and inundation in Southeast Asia using SAR and multispectral remote sensing data. As part of her research, she has developed a Python algorithm that automatically detects the coastline and helps identifies coastal inundation from SAR images. She is the co-organizer of the Twitter initiative SistersofSAR, promoting women in the field of SAR remote sensing.



Ifeanyi Ike

Coordinator, GIS Services
eHealth Africa, Nigeria

Ifeanyi designed the tool for the assessment of healthcare workers preparedness for Covid-19 response in Nigeria. He designed the web and mobile geospatial analytics tools for the tracking of Covid-19 outbreak in the country, which is hosted on the NCDC website. He also designed the data collection platform for the FFX study, the dashboard for the Covid-19 PPE distribution, sampling scripts for the National Micronutrient and Food Consumption survey, and the M&E tools for the tracking of World Bank 100m grants to States in Nigeria.



Ishveena Singh

Lead Editor
Geoawesomeness, India

Effective communication and storytelling are deeply underrated skills in the geospatial domain and Ishveena is someone who leverages them well to promulgate the real-world value of the GIS technologies. As the Lead Editor of a popular location technologies blog, Ishveena has consistently churned out articles that satisfy curiosity, spark real conversations and shine a light on the unsung heroes of the GIS industry. Ishveena is also an independent consultant to some of the world's biggest drone manufacturers and service providers.



Jakub Karas

Co-founder & CTO
UpVision, Czech Republic

Jakub is currently the President of Unmanned Aerial Industry Alliance of the Czech Republic; Czech drone industry representative in European Union Aviation Safety Agency (EASA); and drone industry representative in International Society for Photogrammetry and Remote Sensing (ISPRS). Jakub also serves as mentor for the Drones, Space, Photogrammetry and Earth Observation in ESA BIC Prague. He has conducted research projects in mapping and drones with almost all Czech universities and research institutes.



Kate O'Loan

GIS Specialist
Australia

Kate was the GIS manager for the John Holland CPB Ghella JV who delivered the Sydney Metro City & Southwest Tunnel and Station Excavation Works – a 15.5 km tunneling project underneath Sydney. For the project, Kate took on the enormous task of developing GIS solutions for the 500+ person project team, many of whom had no experience with using spatial systems. Kate also developed a “Tunnel Tracker Tool” to provide a map-based visualization of real-time data from the five huge tunnel boring machines.



Katie E. Pickett

Program Manager
Cadasta Foundation, USA

Katie trains and supports communities to use geospatial tools to map and document their land and resource rights, having advanced land tenure security for over 2.6 million people in 32 countries. Not only is Katie making a difference in the land rights space, she is sharing her love of geospatial tools and knowledge to a whole new generation of vulnerable youth, women, farmers, Indigenous peoples, forest dwellers, and urban slum dwellers around the world who have learned the power of GIS and data analysis to improve their lives.



Khimlal Gautam

Chief Survey Officer
Survey Department, Nepal

Khimlal was the lead surveyor on the re-measurement of Mount Everest in 2019. He is certified as the only civil servant and surveyor in the world who has scaled the mountain twice. He is also the highest ranking government official from the Government of Nepal to have summited the mountain til date. In addition to his geodetic surveying work for the Department, he also prepares guidelines and policies for land management.



Krystal Azelton

Director of Space Applications Programs
Secure World Foundation, USA

Krystal has a strong foundation of knowledge on government regulation, policy, and legislative affairs. At Secure World Foundation, she promotes improved governance and cooperation in the delivery and use of information derived from space systems. She is currently pursuing several areas of research on geospatial and crowdsourcing, space for the Sustainable Development Goals, and geospatial policy. Krystal serves as the Conference Chair for the Summit on Space Sustainability.



Laura Mugeha

Operations Analyst
Sanergy, Kenya

Laura Mugeha is the regional ambassador for YouthMappers, a student-led network where she supports chapters in Eastern Africa by providing training on open geospatial data and FOSSGIS. She previously organized the #LetGirlsMap campaign to address diversity and inclusivity challenges in the region. Annually, she helps manage the African Women In Tech and Women in Analytics conferences to connect, empower, and educate women in STEM.



Lauren Guy

Founder & CTO
Utilis Corp, Israel

Lauren is a unique entrepreneur in the water industry, a pioneer connecting the spheres of microwave remote sensing and non-revenue water issues, which has never been done before. He founded Utilis Corp in 2013 with one goal – to find water leaks from space. He led the idea generation, algorithm creation, and executed the initial field tests and construction of the initial product. Til date, it is estimated that Utilis Corp has saved 7,200 Mgal of water; 17,000 MW of energy; and 11,300 MT of CO₂ through the leaks found.



Lieven Slenders

Geospatial Manager
Gather, UK

In the last nine months Lieven has led the creation of new data tools to help transform how decision-makers use data to improve sanitation infrastructure and services for 350,000 people. Lieven has led Gather team to design a new data standard to improve data sharing, a new sanitation risk index to improve analysis and a new sanitation data platform to improve the accessibility of geospatial visualizations. The work is about to go into its next phase, working in partnership with four sanitation organization in Antananarivo, Madagascar.



Lilian Ndungu

Thematic Lead-Agriculture and Food Security
RCMRD, Kenya

Lilian pioneered and led the setting up of the Food Security theme at RCMRD. She led the establishment of regional and national crop monitors; supporting the Kenya crop insurance program through tools for sampling that resulted in a 70% reduction in implementation costs; and a rangelands monitoring system that is easing access to monitoring; and early warning information for pastures in Kenya, and that is being used by both the National Drought Management Authority, as well as conservation communities.



Lindsay Chan

Geospatial Analyst
Department of Conservation, New Zealand

Lindsay and the team at DOC use GIS and smart maps to enable the removal of the feral cat population that live on subantarctic Auckland Island. The cats have been destroying the native flora and fauna on this windswept island for more than two centuries. The project, known as Maukahuka Pest Free Auckland Island, uses GIS to track the cats' movements, map their locations, and develop a removal strategy. Alongside her GIS work, Lindsay has helped bridge the technology gap for the team applying the use of drones, AI and GPS.



Macarena Pérez García

Head of Strategic Partnerships and Networks
Institute for Disaster Resilience, Chile

Macarena has worked in the public sector in Chile in different capacities with 11 years of experience. She led the development of technological initiatives for the use of geospatial information in Chile called GEONODO. In 2020, she developed the Covid-19 territorial information viewer, combining a range of Covid-19 and wider statistics, administrative boundaries, and government restrictions on the population, making it a very powerful online tool.



Maitha Alnuaimi

Geographic Information Network Section Manager
Dubai Municipality, UAE

Maitha currently manages two major sections in the GIS Center at Dubai Municipality – the Geographic Information Network Section and the Geographic Information Data Section (acting manager). As acting manager of the data section, Maitha played a significant role in the Covid-19 pandemic prevention and control using geospatial analytics capabilities. Maitha is also Dubai’s first female Emirati drone pilot specialized in 3D mapping. She and her team at the GIS Center use drone to collect data of and around Dubai.



Morgan A. Crowley

Ph.D. Candidate
McGill University, Canada

As a pyrogeographer and remote sensing scientist, Morgan’s research asks how satellite imagery can be leveraged to map and analyze the impacts of wildland fires using rapid and scalable approaches. Within this framework, Morgan uses cloud-based remote sensing platforms, innovative image fusion algorithms, and multi-source satellite data to provide methodological advances for addressing pressing fire monitoring challenges.



Narelle Underwood

Surveyor-General of NSW
NSW Department of Customer Service - Spatial Services, Australia

Narelle was appointed the 25th Surveyor-General of NSW in 2016 – the youngest person in over 200 years and the first female to hold the position. A major role within State Government, she is responsible for the leadership and regulation of the land and mining surveying profession. Working in a profession where women account for only 3%, Narelle is passionate about women in leadership and improving the diversity of her profession and other STEM based careers.



Noorullah Stanikzai

Vice President General for Geospatial Affairs
National Statistics and Information Authority, Afghanistan

Noorullah leads the application of geospatial technology in Afghan government, enabling better governance to prevent land grabbing, illegal mining, illegal deforestation by human interventions as well as more transparency for distribution of food and aid to disaster-vulnerable people.



Paloma Merodio

Vice President and Member of the Board
INEGI, Mexico

In April 2017, Paloma was appointed Vice President of the National Institute of Statistics and Geography (INEGI), coordinating the work of the National Subsystem of Geographic Information, Environment, and Urban Planning in Mexico. Within the same year, she assumed the Presidency of the UN-GGIM Regional Committee for the Americas. Previously, Paloma has participated as a consultant for the government, private and international organizations.



Patrick Cozzi

CEO
Cesium, USA

Patrick works at the intersection of technology and business to lead the open platform for 3D geospatial and bring 3D geospatial solutions to markets across earthworks, defense, and infrastructure. He is a longtime advocate of open source and open standards to enable community collaboration. Patrick started Cesium and 3D Tiles, an OGC Community Standard for massive heterogeneous 3D geospatial data. He is the co-creator of glTF, the open-standard 3D model format.



Patrick O'Neil

Chief Data Scientist
BlackSky, USA

Patrick developed the core algorithms that form the foundation of Spectra AI, BlackSky's AI/ML-powered predictive geospatial analytics platform. Spectra AI automatically analyzes millions of data elements each day, including satellite imagery, IoT data and information from global sensor and signal networks, to track activity around the world.



Rob van Son

Project Lead Digital Underground
Singapore-ETH Centre, Singapore

Rob leads the Singapore Digital Underground project, a collaboration between Singapore Land Authority and the Singapore-ETH Centre with the support of leading industry parties to establish a reliable map of subsurface utilities in Singapore. He co-founded Digital Underground Connect, a community of practice on the topic of underground digital twins, contributing to the development of knowledge and skills of professionals in Singapore and beyond.



Rodrigo Peixoto Ferrão

Senior GIS Consultant
Accenture, Brazil

Rodrigo leads the GeoInsights team at Accenture, where he is responsible for deliveries of innovative projects using GeoAnalytics, GIS, APPs, AR and Machine Learning. In his previous affiliation, he worked on a geotechnical project, merging the use of GIS tools and fieldwork to generate a predictive model for landslide. The model is still used by the City of Rio de Janeiro to assign priority slopes for its risk mitigation projects.



Rohini S. Swaminathan

Emergency Specialist
UNICEF, USA

Rohini works on improving geospatial innovation and promoting its adoption in international organizations, from UNICEF, World Food Programme, UN Development Programme, World Health Organization to the UN Institute for Training and Research. Prior to her career with the UN, she worked with NASA DEVELOP program in utilizing satellite-based Earth observations for social good.



Siddharth Pandey

Senior Associate, Senior Geospatial Technology Manager
Dewberry Engineers, USA

Siddharth manages Dewberry's Geospatial Community of Practice; a venue for geospatial professionals to share best practices, tips & tricks, and professional development opportunities to support each other. He was recently selected as a member of URISA's Vanguard Cabinet 2021-2023 cohort; an advisory board focused on supporting young geospatial professionals by encouraging them to be active in the industry.



Steve Marsh

Founder & CTO
GeoSpock, UK

Steve envisions to unlock the value of spatial analytics for all, with his ideas forming the basis of GeoSpock DB, a high performance space-time database, designed specifically for the data-fusion and complex analytics tasks needed to extract value from IoT and connected device data. The technology is used by smart cities to help conduct traffic pattern analytics; by maritime agencies to quantify pollution emissions; and by the telecom sector to understand customer behavior.



Sujay Sreedhar

Chairman & Co-Founder
Society for Space Education, Research and Development, India

Sujay's passion for Space has always kept him busy with space-related projects, which made him start SSERD – Society for Space Education, Research, and Development. He was able to reach more than 8000 students through various space programs and traveled to the Philippines and Sri Lanka to establish a worldwide outreach initiative to engage students in space, STEM, and dreaming big.



Talal M. Al-Kaissi

Vice President - Space Program & Special Projects
Group 42, UAE

Talal joined the UAE Space Agency in 2018 with core focus functions to activate the Space Agency's Investment Promotion Plan, and the development of a local Space Economy in the UAE. Within 2 years, Talal has helped the Space Agency create an enabling environment for the private sector in the UAE to flourish. In 2020, Talal took a new role at G42 to lead the development of a space vertical inclusive of an investment thesis, products and offerings using AI and cloud computing.



Tushar Chhabra

Co-Founder & CEO
CronAI, India

Tushar worked on a drone that was selected and showcased at the Fort Worth Convention Centre by Lockheed Martin when he was 21. He founded Cron Systems in 2015 which was a startup to increase situational awareness through 3D sensors of the defense forces, airports and in mobility. In 2019, Tushar set up CronAI to build an edge inference perception platform, combining AI and ML that would plug the 3D sensor market gaps.



Xiaojiang Li

Assistant Professor
Temple University, USA

Xiaojiang developed the Treepedia project, which aims to map and quantify street greenery for cities around the world using Google Street View and machine learning. His innovation in bringing geo-tagged street-level images in urban studies has received huge social impacts. The "green view index" he proposed has been widely used in many cities to manage the urban green space.



Zhenlong Li

Associate Professor
University of South Carolina, USA

Zhenlong leads the research team at USC's Department of Geography to develop approaches to harvest geotagged data from social media to analyze the spatial patterns and map the impacts of a disaster event. The ability to analyze millions of social media posts per minute in near real-time will provide solutions for the state Emergency Response Centers to determine where and when the impacts are occurring, which ultimately could save lives.



Zipho Tyoda

CEO
KaTZ Smart, South Africa

Zipho has over 10 years of cross-sector work experience – as a researcher at Council for Geosciences, Acting Director at the Department of Science and Technology, and most recently CEO of KaTZ Smart, a geosciences and remote sensing consultancy. He represented South Africa at the Group on Earth Observations as a co-chair for the data sharing working group, where he played a key role in the opening up of various satellite data access to the user community.



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