



# 50 RISING STARS 2022

**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.**

Started in 2021, the Geospatial World 50 Rising Stars is an initiative to highlight the outstanding accomplishments of young individuals who are proactive and passionate about the value of geospatial technology to the society, the environment and the economy. Selected from high-quality nominations across global community, panel of juries 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 2022*

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## Melanie Abuel

Executive, Industry X- Intelligent Asset Management  
Accenture, Philippines

Melanie has been a proponent for digitalization of water utilities in key metropolis in Manila and a key technical resource for GIS development across growth areas in Asia. Her asset analytics and programs have been recognized in the Philippines, South East Asia and US during User Conferences. She has also worked in Disaster Response and Mitigation as part of a research group under the DOST that analyzes tectonic movements within Philippine fault zones using GNSS technology.



## Asim Ibrahim Al-Ghamdi

General Manager, Geospatial Information Center  
General Authority for Survey and Geospatial Information (GASGI), Saudi Arabia

At a young age, Asim has served as Secretary-General of United Nations Global Geospatial Information for the Arab States. He also served as Secretary-General on the National Committee for Geospatial Information in Saudi Arabia, where he liaised with all government stakeholders. He was on the Advisory Committee on behalf of the Kingdom for the First World UN World Geospatial Information Congress and an active contributor to the UN IGIF framework in Arab States.



## Carline Amsing

Geospatial Advisor  
Defence Geographic Agency, Ministry of Defence  
The Netherlands

As a trainee at the Netherlands' Ministry of Defence, Carline wrote a business case resulting in the establishment of a Human Geography Production Team at the Ministry, which subsequently landed her a permanent position at the Defence Geographic Agency. She is active in the board of Geo Information Netherlands foundation, organizing geo network meetings and promoting the geo profession in the country. She is also active in the FIG Young Surveyors Network.



## Christoph Aubrecht

Program Coordinator, Global Development Assistance  
European Space Agency, Italy

Christoph manages the European Space Agency's Global Development Assistance program which in partnership with World Bank and ADB has mobilized more than \$100 million from both space and development finance resources dedicated to accelerating impact at scale in development operations. He has been spearheading global efforts to mainstream satellite Earth Observation and derived analytical geospatial solutions in the international development domain.



## Minyoung Back

Research Scientist  
SI Analytics, South Korea

Minyoung is one of the rarest female AI developers pioneering the field of SAR data analytics in South Korea. She led her company, SI Analytics' participation in the xView3 2021 challenge hosted by the Defense Innovation Unit under the US Department of Defense to develop AI model that can detect ship vessels without an AIS signal. With the ever-increasing value of AI-based SAR data analytics, Minyoung continues to develop solutions in various fields such as oil tank retention analysis, flood mapping, and others.



## David Borges

Physical Scientist  
NASA Applied Sciences Disasters Program, United States

David is dedicated to solving complex disaster related issues on a global scale through application development and geospatial enablement of Earth observation insights in the context of global policy frameworks, such as the UNDRR Sendai Framework for Disaster Risk Reduction. In his role as Co-Chair of the GEO Disaster Risk Reduction Working Group, he is leading development of an Earth Observations Risk Toolkit to help lower technical and institutional barriers to using Earth observation information.



## Breylla C. Carvalho

Census Analyst  
Brazilian Institute of Geography and Statistics, Brazil

As a census analyst at IBGE, Breylla, along with a geoprocessing team, develops technological tools that enable the preparation of maps to be used in the Census, as well as the assessment of quality of inputs, allowing the collection of important data for the country. Recently, her doctoral thesis, which deals with the coastal variability of the southern coast of Rio de Janeiro in the face of different oceanographic conditions, was awarded at an important national symposium on geomorphology.



## Tommy Charles

National Coordinator  
OpenStreetMap Sierra Leone  
Sierra Leone

As the National Coordinator, Tommy has led and supported the growth and sustainability of OSM Sierra Leone through development of a formal leadership structure, inclusion of women, and representation of Sierra Leone at OSM Africa functions. Tommy is also a YouthMappers Regional Ambassador who has successfully revived, created, and supported several YouthMappers chapters in Sierra Leone and Liberia.



## SueLYnn Choy

Professor, Satellite Navigation  
RMIT University  
Australia

SueLYnn is acknowledged as an international leader in her research field of satellite positioning and navigation. In 2017, SueLYnn became the first female researcher to receive the Australian National Measurement Institute Prize for her work with robotic tractors and is now laying the groundwork for significant improvements to Australia's current global satellite navigation systems.



## Ruth Cookman

Head of Policy  
Geospatial Commission  
United Kingdom

Since she started at the Geospatial Commission, Ruth has developed and coordinated many of the UK key geospatial policy projects through extensive stakeholder engagement and growing her own geospatial knowledge. She has notably developed and overseen the location data ethics policy work and the publication in December 2021 of a unique (first in the UK and the world) report on the perception of the public on the ethical use of location data.



## Hayley Evers-King

Marine Applications Expert  
EUMETSAT  
Germany

Building on a research career using satellite data for marine applications, Hayley works to support scientists, businesses, and governments around the world to solve the many and varied challenges facing our oceans. An expert in ocean color data, she has further developed broad interdisciplinary knowledge across multiple satellite data streams and applied these skills to applications including ocean heat fluxes, climate model validation, and ocean carbon uptake.



## Kate C. Fickas

Mendenhall Postdoctoral Fellow  
USGS | UC Santa Barbara Climate Hazard Center  
United States

During the September 2021 Landsat 9 launch, Kate was instrumental in creating events that showcased under-represented EO scientists, including a live interview on NASA television. At USGS EROS and UC Santa Barbara, she uses dense Landsat and MODIS time series, land use and land cover change, and climate data to develop new Landsat science products and aid in water resource forecasting and management.



## *Mina E. Gerges*

GIS/Software Development Team Leader  
IT Smart Vision  
Egypt

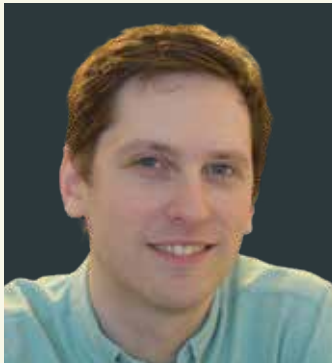
Mina has developed an interactive GIS application of an online management catalog for the French Centre for Economic, Judicial, and Social Study and Documentation (CEDEJ) map library. The library consists a unique, multi-scalar collection of cadastral, topographic, and geographic maps covering all of Egypt ranging from 1/500th to 1/1,000,000th scale. Mina's catalog allows the access, extraction, and exploration of textual and geo-referenced data, all carried out within open-source framework.



## *Alex Harper*

GIS Manager  
Central Arkansas Water  
United States

As the GIS Manager at Central Arkansas Water, Alex provides innovative geospatial solutions to problems the utility faces. He leads two separate teams between Central Arkansas Water and Pulaski Area GIS totaling 11 geospatial professionals. These teams created applications for pandemic response both within the utility and to assist in making sure citizens have access to clean drinking water.



## *Pierre E. Fablon*

GIS Officer  
Glasgow City Council  
United Kingdom

Since joining the Council only a few years ago, Pierre has developed many innovative geospatial data solutions to support multiple initiatives across the council. This includes his current project where he is combining health, police and council data to deliver space-based insight into alcohol and drug deaths and harms in the city. This is ground breaking work as the data has never been combined across agencies before.



## *Nandhini Karthikeyan*

CTO  
Numer8  
India

Nandhini has successfully led a team of GIS scientists, data analysts, and cloud architects at Numer8 to create a globally unique product. Developed for marginalized fishing communities, N8 Ofish has attracted more than 3500 users in Indian fishing communities. This GIS product aims at providing timely data for improving fishermen's revenue and most importantly their safety during their trips.



## Alan Kharsansky

VP Mission Engineering and Satellite Operations  
Satellogic  
Spain

Alan was one of the first ten employees at Satellogic and has been part of almost every innovation of the company. He helped create inexpensive ~40kg EO satellites that produce 1m GSD imagery, now leading the deployment and operation of these satellites in Space. Alan has worked in educational robotics projects and university research labs before joining Satellogic. He has also taught university courses on embedded systems and space systems engineering.



## Viola Kirui

Director and Co-founder  
Geospatial Research International  
Kenya

Viola heads the water and environment unit at GRI and has led a number of high impact projects across sub Saharan Africa. She developed an Earth Observation tool called the COLWED, used for the valuation of over 13 ecosystem services from terrestrial lands and wetlands ecosystems with a main aim of showcasing the true value of nature, and in a bid to influence policy with regards to conservation efforts.



## Yariwo Kitiyo

Senior GIS Analyst  
Proto Energy  
Kenya

Yariwo works as a senior GIS analyst at an FMCG company where she handles supply chain digitization, precise market analysis and streamlining the sales reporting funnel for operational efficiency. She was part of the COVID-19 National Task Team that created a spatial risk index to understand communities' unique vulnerabilities and inform planning and resource allocation. The team also created a COVID-19 self-assessment tool in an effort to help slow the outbreak.



## Anirudh Koul

AI Scientist  
Pinterest | SpaceML  
United States

Anirudh is a Data Scientist at Pinterest by day, and working pro-bono on Earth Observation for climate change for 1.5 years. He is the Co-Chair of UN Environment Programme/ ITU Focus Group on AI Tools for Natural Disaster Management, conducting world's largest study on the topic. Anirudh founded SpaceML, an AI accelerator for NASA where citizen scientists worldwide build open-source tools to help accelerate understanding of climate science with AI.



## Confidence Kpodo

Regional Ambassador  
YouthMappers  
Ghana

Confidence led the first ever virtual mapathon for eight chapters in her country to map Covid-19 hotspots during a lockdown to aid health workers in reaching vulnerable populations in such areas. Currently as a Regional Ambassador for YouthMappers in the West African sub-region, she offers training, mentorship to students in tertiary institutions on the importance of GIS in a Covid-recovering world today, and the benefits of geospatial data.



## Iris Kramer

Founder and CEO  
ArchAI  
United Kingdom

Iris founded ArchAI, which uses AI to automatically detect archaeology on EO imagery to protect heritage and de-risk construction. She started her career in archeology but recognized a gap in automated methods for the detection of archaeological sites. With mission to get automation back on the archeological research agenda, ArchAI is now investigating how crowd intelligence can help train AI, explore large areas for hidden archeology and create social impact.



## Andrew Lamers

GIS Analyst  
Optum  
United States

Throughout his 10 year career, Andrew has worked in the Public and Private sectors as a GIS Technician, Analyst, and Administrator. An active volunteer, Andrew has served on the board of directors for two non-profit organizations, and is currently a committee member with the Minnesota GIS/LIS Consortium. After completing the URISA GIS Leadership Academy in Fall 2020, Andrew served as an instructor at the URISA GIS Leadership Academy in December 2021.



## Peter E. Lenz

Vice President of Data Science  
Near  
United States

Peter grew as a data scientist, starting by buying and cracking open cell phones to get a look at their GPS chips, moved on to designing petabyte-scale real time custom GIS to store data, and worked to figure out how to actually leverage all that data to learn about the world. Along the way, his work was featured from economics journals to ESPN. In 2017, his work on using mobile data to understand the nature of sports fandom was Quirks' Groundbreaking Research of the Year.



## Peter M. Macharia

Postdoc Researcher, Newton Int'l Fellow  
Lancaster University, UK & KEMRI Wellcome Trust Research Programme, Kenya

Peter is a spatial epidemiologist collaboratively between Lancaster University, UK and KEMRI-Wellcome Trust Research Programme, Kenya under the Royal Society's Newton International Fellowship. He is currently improving geospatial methods of mapping disease prevalence in presence of incomplete spatial information. Peter has been part of the team that mapped first geocoded pan African database of all public health facilities and made it openly accessible.



## Pooja Mahapatra

Solution Owner - Geospatial  
Fugro  
The Netherlands

Pooja's passion lies in applying geospatial data to make a meaningful impact on real-world problems. Since 2019, she has worked on commercializing a variety of cutting-edge Fugro innovations, with applications ranging from coastal resilience to railway track maintenance. From 2016 to 2019, she led the global technology deployment efforts in the geospatial domain at Shell, contributing to their digital transformation journey.



## Marie B. Makuate

Geomatician Researcher  
National Institute of Cartography  
Cameroon

Marie is passionate about the environment, climate change, biodiversity loss and how these issues are affecting people. For her MSc, she developed a topic to understand how climate change was affecting communities in the East region of Cameroon. At NIC, she has contributed in many projects, including updating the map of the northern part of Cameroon, and assisting the Ministry of Forest and Wildlife in developing a distribution map of protected areas.



## Juliana McMillan-Wilhoit

Network Strategy Analyst  
Ahold Delhaize USA Supply Chain Services  
United States

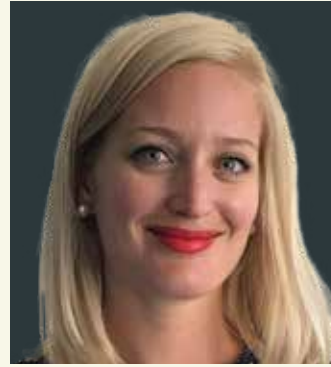
Juliana is one of the co-moderators for the weekly "Geospatial Connections" conversation on Twitter Spaces. Additionally, she works as a mentor to help geospatial professionals navigate their careers—through her popular LinkedIn content, YouTube, Mappy Hour Networking Events, and one-on-one coaching. She serves as a Team Lead and Data Manager for the first global geo-design product, called ENSITE, a US Military product to help with site location for any location on Earth.



## *Flávia de Souza Mendes*

Remote Sensing and GIS Analyst  
Remote Sensing Solutions GmbH  
Germany

**F**lávia started her career in 2007 at the National Institute for Space Research in Brazil. She learned and added value in important projects and initiatives in the field of environmental protection and climate change in tropical biomes, mainly in the Amazon and Savanna. Through her large network of contacts, she connects companies and institutions in Europe with local communities in Brazil for greater development, collaboration and inclusion in the geospatial sector.



## *Stephanie Michaud*

Strategic Marketing Manager  
Trimble Inc.  
United States

**S**tephanie led the development and global marketing of the first Android guidance display and autonomous end-of-row system for precision farming, and holds US/EU patents for three-dimensional elevation modeling. As a sales engineer, she led Trimble's first Latin American cadastral project with USAID in Colombia. Today she manages the geospatial portfolio of market-leading survey software and external partnerships worldwide.



## *Ananyaa Narain*

Director - GW Consulting  
Geospatial World  
India

**A**n economist by education, Ananyaa has been breaking new ground in research and consulting in the geospatial domain. Her work explores the impact of the cross-linkage of technology, economics, and policy using varied qualitative and quantitative tools & frameworks. She explores innovative ideas and processes to champion the adoption of geospatial technologies and its integration with cross-disciplinary workflows.



## *Jakub Nowosad*

Assistant Professor, Institute of Geocology and Geoinformation  
Adam Mickiewicz University  
Poland

**J**akub is a strong proponent and advocate of open-source software and open science in general. Geocomputation with R, the book he co-authored, is currently the primary resource for people wanting to learn geographic data analysis, visualization, and modeling using the R programming language. His ideas are most often accompanied by open-source software with extensive documentation.



## Jean Claude Ntirenganya

Spatial Data Infrastructure Specialist  
Land Management and Use Authority  
Rwanda

Jean Claude has led the establishment of the Rwanda Spatial Data Infrastructure Hub, a platform for harmonized spatial data collection and dissemination in Rwanda. The hub contains mainly fundamental geospatial datasets from different institutions in Rwanda, and other important GIS products, such as topographic maps and land use plans. He has also coordinated the customization of data visualization tools to support decision making in different sectors.



## Manuel Ntumba

Regional Partnership Manager  
United Nations Space Generation Advisory Council  
Austria

Manuel is among the World's Top Experts, Innovators, and Entrepreneurs, selected from around the globe by US-based XPRIZE FOUNDATION. Several of his research publications got featured on Harvard (SAO) – NASA Astrophysics Data System. Manuel has worked in collaboration with the presidential panel of the African Union of 2021-22 (Democratic Republic of Congo), to develop a roadmap on using space and geospatial technologies to achieve the Agenda 2063 of the Union.



## Phoebe Oduor

Thematic Lead – Land Use Land Cover and GHG Inventories  
Regional Center for Mapping of Resources for Development  
Kenya

Phoebe has led SERVIR-Eastern and Southern Africa Land Cover theme at RCMRD for several years. Thanks to her leadership, co-development of multi-annual land cover maps in multiple countries in the region was successfully accomplished. Her work has enabled provision of land cover state-of-the-art expertise to national countries. She embodies the mission of SERVIR and RCMRD, and her commitment and dedication have translated to greater EO and geospatial capacities.



## Eunice Offei

Senior Land Administration Officer  
Lands Commission  
Ghana

Eunice has over 10 years' experience in property/asset evaluation, land management and land governance. She looks beyond the traditional concepts of land administration to really bring an understanding of the role of valuation to a global audience. She wrote a technical paper on Compliance with Residential Building Standards in the Context of Customary Land Tenure System in Ghana.



## Taiwo Ogunwumi

President  
Geohazard Risk Mapping Initiative  
Nigeria

Having discovered the lack of data collection, mapping, and communication of early flood warning maps, Taiwo developed a survey app used to report flooding instances in real-time which is now being used to report areas prone to flooding. At GRMI, he leads a team of twenty-five volunteer youths working collaboratively to create flood prediction statistics maps and interactive web maps, used by the National Emergency Management Agency of Nigeria.



## Heather Porter

Senior Geospatial Analyst  
Office for National Statistics  
United Kingdom

Heather is responsible for undertaking and assisting with geospatial analysis that supports statistical outputs for Census at ONS. She leads a team of analysts who work to produce results and improve disaggregation for the UK's reporting of the SDGs. She is a key member of the Women in Geospatial+ steering committee, co-leading the mentorship programme, which helps support and develop women and people from under-represented genders across the globe to further their careers.



## Uttam Pudasaini

Director, NAXA  
Executive Director, Nepal Flying Labs  
Nepal

Uttam co-founded a location-based service provider company NAXA at the age of 23. NAXA is now a team of 60 people and has worked in a wide range of geo-data collection, management, and visualization-related projects in Nepal. Under the guidance of International experts, he co-created Nepal Flying Labs, the first-ever flying labs that focus on localizing robotics particularly drone technology for disaster management and development issues in disaster-prone countries.



## Frank Romo

CEO  
RomoGIS  
United States

Frank and his company, RomoGIS, develop solutions to support underserved communities and address racial and social inequities in our environment. He was recently selected to participate in the inaugural The Memorial Foundation's Social Justice Fellows Program, where he works with other fellows to share experiences and best practices for advancing social justice. Frank also teach students at the Frederick Douglass Academy for Young Men about GIS and career opportunities.



## Jessica Scheick

Research Assistant Professor  
University of New Hampshire  
United States

Jessica's scholarly research employed Landsat and ICESat-2 data together with machine learning to detect icebergs and characterize changes in calving rates in Greenland Fjords. She leads the icepyx effort: an open source software library, providing a shared library of resources that simplify the process of querying, obtaining, analyzing, and manipulating ICESat-2 datasets to enable scientific discovery.



## Roshni R. Sharma

Project Manager & Geospatial Analyst  
FrontierSI  
Australia

Roshni dedicates her life to harness Location Intelligence to create tangible positive change for society, creating real traction around sustainability and leveraging tech for good in her role at FrontierSI. As Chair, National Young Professionals and Board member for the Surveying & Spatial Sciences Institute, Roshni has founded a global geospatial mentoring program, guiding 700 participants over four years and growing.



## Ayeisha Sheldon

Geospatial Analyst  
UNOSAT-UNITAR  
Switzerland

Ayeisha started her international professional career at just 21 years old, when she interned and worked at the Asian Institute of Technology. Since graduating her bachelors in 2016, Ayeisha has been a part of the geospatial community across the world; Australia, Thailand and currently in Switzerland. She has leveraged her technical and personable skills to contribute to sustainable and humanitarian development and has worked at two United Nations agencies (ESCAP and UNOSAT).



## Mayank Singh

Chief Digital Officer  
Domino's Pizza Indonesia  
Indonesia

Mayank established India's first Hyperlocal on-demand Digital Commerce ecosystem at Domino's India, and chaired the cross functional team to grow the Digital business that turned into biggest food tech platform. He has defined 3D and 3E framework for data utilization and location intelligence to drive sales for retail organizations. He is the advisory board member at multiple global conferences on topics such as Future of Digital, eCommerce, Omni-Channel Retail, and others.



## Suyash Singh

Co-Founder & CEO  
GalaxEye Space  
India

Suyash co-founded GalaxEye Space, a space technology company building a constellation of Edge computing-based Earth imaging satellites. He was previously the founder of Team Avishkar Hyperloop, the team that built India's first ever self-propelled hyperloop pod prototype. Suyash spearheaded the team to become the only Asian finalists and one among top 21 out of 2500 global applicants at the SpaceX competition.



## Rajan Srivastava

CEO  
Heliware  
India

To help clients work with large amount of data coming from drones and other sensors, Rajan started Heliware, India's first end-to-end indigenous 3D Geospatial Stack, which provides various data visualization and analysis library that helps users to render terra byte of data in just a few clicks. The platform is currently being used by tens of thousands of developers around the globe and leading EPC companies in India, including NTPC, LNT, Kalpaturu, Renew Power etc.



## Gabriella Wiersma

Advisor Geospatial Standards  
Geonovum  
The Netherlands

Gabriella is one of the driving forces behind the continued innovation of the Dutch SDI at Geonovum. She combined her knowledge on API standards, linked data and semantic web, and lighter encoding formats into a new SDI framework. Besides her work on Dutch standards for the SDI, she also participates in several international working groups such as the OGC GeoSPARQL SWG and the OGC Features and Geometries JSON SWG.



## Lauren Williams

GISc Professional  
Department of Forestry, Fisheries and the Environment  
South Africa

In her role at DFFE, Lauren focuses on the development of online tools, geospatial models and data to assist coastal/disaster management practitioners to better prepare and plan for coastal hazards (primarily inundation). She is one of the core team members responsible for South Africa's Oceans and Coastal Information Management System (OCIMS), which makes data and information available to stakeholders and the general public.



## Tianren Yang

Assistant Professor  
The University of Hong Kong  
Hong Kong S.A.R.

Tianren leads the research team at the University of Hong Kong that aims to develop geospatial analytics and urban modeling to decipher how city regions evolve in terms of land development, human activity, and social welfare. Apart from engaging with the academic community, Tianren consults widely in the real estate and city development industry, where he endeavors to apply research insights to practical decision-making.



## Fan Zhang

Senior Research Associate  
MIT Senseable City Lab  
United States

Fan leads the team of the Urban Visual AI at the MIT Senseable City Lab. His work focuses on using geospatial big data to perceive the built environment and measure its association with human perception, human dynamics, and socioeconomics. He has conducted various research projects in decision support for smart and sustainable city applications, public policy-making, and government consulting.



Read the Rising Stars' full profile at <https://www.geospatialworld.net/rising-stars/2022/>



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