Geospatial Data Engineer
financial services platform for small coffee farmers

overview

Are you a strong and experienced GIS Data Engineer with an open-source mind and looking for a leadership opportunity in a startup that is reinventing socially-responsible financial services for smallholder farmers around the world? Would you like to develop algorithms to predict coffee farmers' yields from historical data, supply chain data, and satellite data? Would you like to work with major financial institutions in the coffee industry, helping boost funding flow towards coffee farmers, and promoting financial inclusion while helping the coffee industry professionalize? If your calling in life is to make an impact on the lives of millions of people, join our team and help us lead this bold approach to revolutionise smallholder financing for coffee and beyond.

about us

Small Small farmers are critical to the world and represent one of the most vastly underserved financial markets in the world. Access to credit through technology is at the heart of this challenge but a data-driven farmer is only as strong as its weakest supply chain partner. Given the particular complexities and uniqueness of agriculture, a "value chain approach" to financial services that leverage on existing supply chains coupled with innovative technology is a disruption ready to happen. Moreover, it is the entry point to address global challenges related to sustainable rural development (e.g. Climate Change, poverty alleviation, food security, gender empowerment, etc.) and enable solutions that produce global positive network effects.

Vinculum is an angel-backed startup building an enabling platform to transform access to finance for small farmers. As an innovation leader in rural financial inclusion, we are building credit ecosystems able to leverage the power of global supply chains and Machine Learning to foster new generation of micro-financial services for small agriculture pioneering a three-part solution: 1) improve the scoring of farmer "credit-worthiness" with an alternative algorithmic approach tailored to agriculture and natural data around small farmers, 2) empower agribusinesses and their supply

chains as alternative aggregation points for financial service delivery, and 3) provide financial institutions a simplified entry-point to small farmer banking.

Coffee is our first market (80% of global production depends on farms smaller than 5 hectares) and our Proof of Concept has been possible thanks to data partnership with a best-of-class rural microfinance institution in Central America and the financial support from major banking group highly relevant to the global coffee trade. Vinculum represents >20 months of work by the founder, a sustainability expert with +10 years working in sustainability and business innovation in Latin America across private & public sector, as well as NGOs, academia and multilateral development institutions. For the past 5 years he has been focusing on agricultural supply chains, particularly the evolution data, technology and sustainability in the global coffee industry. The learning curve has been steep but we are ready for you to bring your geospatial skills and take us to the next level.

We are looking for….

Experienced geospatial engineer able to take projects from the whiteboard to reality. As lead Engineer you will build our core GIS foundations to develop and implement algorithms and applications that utilise large geospatial datasets for agriculture and forest applications. Since you are an awesome Software Engineer hungry for complex challenges, your interdisciplinary ninja skills allow you to develop advanced geospatial products to finance sustainable agriculture at scale. Naturally, you also love adventure, problem-solving and team-building.

What a typical week may look like at Vinculum:
- Identify new and unique ways to capture data
- Classifying agri-climatic features to deliver increasingly tailored credit scoring and farmer financing products
- Build automated decision-making tools
- Data pipelining / ingesting ETLs
- Implement robust interfaces to allow integration with our platform
- Solution oriented development
- Travel to beautiful, tropical locations where coffee is grown

What we value in a EO Data Engineer:

- Several years of experience performing applied research in industry or considerable experience in academia at postdoc level
- Good programming skills (preferably Python), familiarity with database design and programming, as well as domain-relevant cloud processing and hosted processing environments
- Knowledge of open source GIS such as QGIS and Qt framework
- Practical knowledge in statistical modelling
- Knowledge of geospatial data sources, archives, characteristics and methods.
- Preferred: MSc or PhD in Computer Science, Mathematics, or a related technical field
- "Bonus Points" Spanish language skills (Vinculum works extensively in Latin America)

What you get:

- Being part of a VC-funded startup, setting the tone, and making important decisions from day one
- A fast-paced and collaborative process
- Work with our network of excellent advisors and mentors
- Competitive compensation and founder equity
- Plenty of room for personal growth

We're looking forward to your application! Please send your CV, cover letter any other supporting documentation you think relevant to manuel@vinculum.cloud.