

# Senior Software Developer - Modelling



**Match your skills to a career where you're not just doing a job; you're making an impact every single day.**

At Farmers Edge, we're addressing the global challenge of feeding the world's growing population while reducing environmental impact. We're a diverse group of thinkers and doers, motivated by challenges, curiosity and bold ideas. Our culture is the foundation of our company, connecting innovation and disruption with the passion that drives us. From the software and digital tools that we create to the conversations we share; the collective force of our team is influencing revolutionary changes in agriculture to bring new levels of sustainability and opportunity to farmers and agricultural professionals.

Rapidly expanding worldwide, we're focused on creating a diverse environment of talented individuals. Working with high-quality data sets, cloud connectivity, AI-driven algorithms and predictive models across web, mobile and app platforms, we offer a range of roles in multiple locations where you can build impactful, data-driven experiences and feel empowered to make a difference.

Join us to work with a company whose team is as innovative as its products. Together, we can make the impossible, possible.

## **Senior Software Developer (Modelling)**

**Location: Corporate Office, Winnipeg, MB**

Reporting to the Software Manager (Modelling Team), the Senior Software Developer will join a small, focused team responsible for creating and improving software tools for our primary platform from cutting edge technologies and algorithms devised by our research and development team.

We use large quantities of data from soil test results, weather, remotely sensed data and user inputs across multiple countries and continents to build predictive analysis tools.

Some examples of current projects include:

- Crop Yield Prediction
- Crop Nutrient recommendations
- Virtual soil test generation
- Predicting crop stages
- Predicting crop disease risk
- Predicting crop insect pest risk
- Soil sampling data processing
- Historical Weather data processing

These applications provide the tools needed to make educated agronomic decisions by our clients.

**Duties may include the following:**

- Back end programming / coding and following software development life cycle;

- Develop or improve algorithms used in simulations;
- Validate simulated results against real world and test data;
- Interface and parse data with other external systems via HTTP services;
- Gather information through interviews, focus groups, online research, etc.;
- Participate in daily planning activities such as Scrum meetings;
- Improve deployment processes by developing RESTful API;
- Develop and document tasks and performing code reviews;
- Document internal and external source code using sphinx, swagger, confluence;
- Automatic and manual testing (Including end to end and unit testing);
- Troubleshoot deployed applications;
- Participate in internal management meetings;
- Collaborating with the Machine Learning, User Interface, Geospatial, Research and Development, Web services, Quality Assurance and other teams;
- Other duties as assigned.

#### **What you'll need to succeed:**

- At least 5+ years programming in a software development environment;
- Advanced Python / Django or Backend Web Development (Other languages are acceptable e.g. C, C++, .NET, JAVA);
- Demonstrate proven past completed software projects;
- Knowledge of HTTP services;
- Revision control software (e.g. Git);
- Unit testing;
- Agile / Scrum / SDLC methodologies;

#### **We would love to see:**

- At least 5+ years of experience outside of academia;
- Education in Computer Science with a focus on programming (Degree, or Graduate studies);
- Education in Biological, Agricultural, or Geographical Science and experience in computer programming will also be considered;
- Agricultural knowledge considered a strong asset;
- Creative, motivated, resourceful and passionate about what they do;
- Knowledge of agricultural software tools (e.g. DSSAT, Farmworks, SMS) considered a strong asset;

#### **What you'll get:**

- Flexible working hours;
- Competitive compensation;
- Extensive benefits package;
- Employer matched DPSP retirement plan;
- Enterprise level experience with complex systems and technically challenging work.