



February 24, 2020

Company: Adaviv Inc.
Position: Data Science and Software Engineer
Start Date: immediate

Position type: parttime position or fulltime internship Industry: Agriculture, Technology

Where would you work?

AdaViv is an innovative agriculture technology company specializing in greenhouse and indoor farming. Founded in 2018 by four former MIT researchers/students, we are a venture-backed startup and have an excellent track record in MIT's entrepreneurial ecosystem. We are developing vision-based crop-care software that uncovers hidden plant biometrics and translates them into actionable insights for cultivators. By initially focussing on high value crops like cannabis, we are enabling growers to prevent losses due to pathogens and pests and continually improve the growth of each plant.

We're a small, high-performance team who's domain expertise covers all dimensions of our product, from biology to AI and business. We're excited by solving complex engineering and business challenges to provide real value to farmers and help build the future of sustainable agriculture.

What would you be doing?

We're looking for a driven individual (grad student, researcher, professional) with a growth mindset who's interested to contribute their expertise to a fast-paced, collaborative and fun startup environment. While focussing on building and testing custom software, you will get to wear many hats and be exposed to many dimensions of building a deep-tech product, including:

- Working closely with the founding team, ML, Software and Hardware Engineers to prototype, develop, test, and deploy various modules of an Al-to-Insights pipeline.
- Building additional features into the company's current web applications.
- Define the software requirements for improving the automation and scalability of cloud computing-based workflows; including data lake management and data preprosessing.
- Automating and building internal tracking metrics, analytics and visualizations.
- Design and carry out experiments to test the efficacy of a variety of deep learning architectures and fine tuning model.
- Collaborate with hardware engineering teams on image processing techniques, calibration methods, and novel approaches to imaging.

What are we looking for?

- Hold or are pursuing a degree in Computer/Software Engineering, Applied Machine Learning, Information Systems or a related field.
- 1-3+ years experience in software development in an industrial setting (graduate students with exceptional functional and communication skills will be considered).
- Proficiency with data science tools and DB programming such as SQL, Python and fluency in Javascript (asynchronous programming, types, and ES6).



- Understanding of principles of software development using agile and continuous development methodologies.
- Strong background in test-driven development and ability to independently carry out all phases
 of a software development process (analyze requirements, design, construct, test, debug, deploy,
 maintain).
- Integration experience using interfaces and AWS, Web APIs in JSON and XML formats.
- Solid understanding of machine learning, including deep nueral network architectures and parameter fitting; up to date with the applied research developments in this field.
- Ability to serve cross functional roles in a young company.
- Highly effective communicator and the ability to summarize complex information.

What additional skills are valued?

- Experience rapidly iterating data visualizations and user interface features (e.g., interactice querrying) in collaboration with other engineers is an asset.
- Front-end development experience, particularily in the React development framework and the ecosystem around it.
- Understanding of design theory (UI/UX) and an eye for design is an asset.

You will be working with a small integrated team of experienced engineers as well as machine learning, biological and data scientists in a fast-paced startup environment. In addition to well-developed technical abilities, you must be able to demonstrate excellent teamwork, communication, empathy, creativity and time management skills.

Final Words

The position status is flexible, as we are looking immediately for part-time but will consider full-time internships or a quick transition to full-time (summer 2020). There will be an opportunity to become a long-term and core member of this growing team and exciting company. You will operate as a member of a fun and diverse team (7 nationalities and counting!) as well as completing work independently.

We value integrity, excellence, hard work, respect, and collaboration. What we are trying to build at AdaViv that is special though is to promote and foster diversity of people and ideas, while cultivating empathy for our customers and for fellow team members. Principles of sustainability are also at our core.

You want to be part of this team? Give us a shout at apply@adaviv.com, we can't wait to hear from you!