# **Jake Cook**

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## **Objective**

Obtain full time employment in an entry level software development position focused in web, full stack, data science, security, or similar fields

## **Work Experience**

## **USU Space Dynamics Laboratory**

## Assistant Software Engineer April 2020 – Present

Developed custom software solutions, performed research, and created data visualization for internal and government customers. Maintained and performed security and bug fixes on spoonsite.com, an open-source website. Worked in various Agile teams using CI/CD toolsets including Jira, Bitbucket, git, Jenkins, and Confluence.

- Software design, implementation, testing, debugging, and reviewing code for coworkers and teammates
- Developed software solutions in Python, Java, Javascript, and Vue.js with databases in MongoDB and PostgreSQL
- Practiced both open-source and proprietary data handling and control methodologies

## **Vivint Smart Home**

#### Summer Installation Technician Summer 2018, 2019

Installation and maintenance of smart home security systems in residential and commercial buildings. Managed small teams of technicians and communications with sales teams and customers. Incorporated existing security equipment into new smart home technologies, such as sensors, cameras, and automated devices.

- Testing of alarm networks, camera systems, and home network quality and security
- Licensed for alarm systems, HVAC systems, and locksmithing in Arkansas and Tennessee, additional training in other areas
- Team expert in Networking technologies and electrical troubleshooting

## **Dupont Pioneer (Corteva Agriscience)**

**Greenhouse Technician** Summer 2015, May – December 2016, Summer 2017 Operation and care of facilities, cleaning, sanitation, harvest, and production of corn and soybeans. Led specialized projects updating, troubleshooting, and installing automated greenhouse production control systems.

- Specialized projects included overtime work to custom design and build computer-controlled plant sampling stations, rewiring of sensing equipment for automated systems, and automated robotics projects
- Work with an engineering department to assemble and test new green house automation

#### **Professional Education**

- Programming in Java, Python, javascript, javascript variants, HTML, and some familiarity with functional language methodologies
- Algorithm and data structure development in Java, Python, and Javascript
- Cloud design and development in AWS, Heroku deployment for small projects
- Full stack web development
  - HTML, CSS, Django, Vue.js, javascript, Java, MongoDB, PostreSQL, Bootstrap
- Data visualization scientific and interactive in Python and Paraview
- Introductory mobile development in react-native
- Computer architecture with MIPS language and basic architecture design
- Git for version control and CI/CD integration
- Mathematics in Calculus 1-3, Linear Algebra, Statistics, and Discrete
- GIS open source and proprietary software, server setup and use, and industry methodologies, including Cesium.js, tiled imagery, and 3D terrain generation
- Software development techniques
  - o CI/CD tools Jira, Butbucket, Confluence, git, etc
  - UML and software design
  - Agile methodologies for small teams and rapid development

## **Skills & Other Education**

- Experience with Linux (2.5+ years), Bash, open source software
- Servers, Virtual Machines, Docker/containerized systems, SSH, etc
- Installed and configured VPNs, NAS, Plex, and more on linux servers
- Setup projects using RAID arrays and various hardware and network toolkits
- Experience in and understanding of the space industry, satellite manufacturing and deployment process, government contracting, horticulture, and agriculture businesses
- Equipment management, maintenance, and repair
- CPR and basic first aid training
- Completing tasks in a timely fashion with attention to detail
- · Self-discipline and punctuality

### References

Tyson Fullmer Office Manager, Vivint Smart Home 208-821-8177 Rex Nethercott Supervisor, USU Space Dynamics Laboratory rex.nethercott@sdl.usu.edu