Collin Smith • collinxsmith@gmail.com • (319)-535-2356 • Cedar Rapids, IA

Professional Experience

InfraLytiks - Co-Founder - Des Moines, IA, June 2016 – Present

Software Engineer / Sys Admin

- Supporting Linux and Windows staged environments for large scale cloud-based applications.
- Meeting with clients and contributing solutions throughout lifecycle of software development.
- Forming and maintaining hardware and software standards within company model.
- Cloud architecture process design and software integration of custom Machine Learning Models.
- Implementation of AWS CICD services in commercial software development lifecycle.
- OOP with Python using API for autonomous processing of raw data from UAS and aircraft.
- Design of mobile app and back-end interoperability for efficient UAS digital data processing of photogrammetry and data analysis reports.
- Communication with team members to capture software requirements and meet objective deadlines.
- Agile work environment through collaborative efforts maintained with online scrum Trello boards.
- AWS Cloud Practitioner Certified from Amazon

Geographic Information Systems Project Engineer

- Proficiency with open-source software, QGIS, used in geographical data analysis.
- Lead a $100k contract for creation of geospatial analysis data for Wind Turbine Industry.
- Design of ML backend for object identification and shapefile generation of geospatial vector data.

UAS Systems and Operations Engineer

- Managed Iowa State University ECpE Senior Design team in design of robotic arm for UAS.
- Developed and created circuits for multiple custom sensors onboard UAS platforms.
- Prototype design for NDE inspection methodologies using multi-rotor UAS platforms.
- Performed commercial flights of UAS as Pilot in Command - FAA Part 107 Remote Pilot Certified.

Education

Bachelor of Science in Aerospace Engineering, Iowa State University (2017)

- GPA: 3.14
- Minor in Non-Destructive Evaluation
- Leadership: Make2Innovate, Eagle Eye Capsule Design Team Lead (2015 - 2016)
- Structural load and environmental testing of innovative airframe and layout design of avionics bay in a teamwork-based setting

Undergraduate Research, Iowa State University (FAA) (2015-2016)

- Manufactured hundreds of thermal sensors with hands-on work
- Created testing environments for critical development of self-heated runway prototype
- Implemented commercial prototype self-heated runway installed at KDSM (Des Moines, Iowa)

Technical Proficiencies

- Languages: Python, Bash, MATLAB
- Operating Systems: GNU/Linux, Windows
- Adaptive and fast learner
- Software: Nginx, Apache, Django, SQLite, Docker, Microsoft Word, Excel
- Documentation of processes and paperwork

Personal Projects

Software Development and Technical Skills

- Road condition monitoring experiment using embedded inertial sensors in Android devices
- OOP in Python for development of interactive bots in VoIP and online chat platforms
- Network performance testing application and web server designed for Raspberry Pi
- Secure self-hosting: best practices, email server, personal website, SSL Certs, VPS, video game servers