Charles W. Koch

charles.w.koch@gmail.com   412-498-5080   Oakdale, PA 15071
http://www.cerrax.com   linkedin.com/in/cerrax/
gitlab.com/users/charles.w.koch/projects

SKILLS

Technical

Platforms:	macOS Linux Windows Amazon Web Services (AWS) Docker / Kubernetes	
Languages:	Python Java JavaScript SQL NoSQL C / C++	
Frameworks:	Django Poetry Spring Hibernate jQuery NodeJS Vue.js	
CI/CD Tools:	GitLab CI Jenkins CloudFormation Snyk Artifactory Prisma Cloud	

Professional

Collaboration for design, implementation, and installation of projects of many disciplines
Management of small design & engineering teams as well as training employees
Writing documentation and training materials for both technical and non-technical personnel

WORK EXPERIENCE

Staff Software Engineer   **Blackhawk Network** – Pleasanton, CA (remote)   Nov. 2022 – Present

- Migrated over 50 projects into the development pipeline by establishing a standardized CI/CD workflow for Python projects using Poetry and Docker within a Jenkins pipeline.
- Improved deployment times by 90% by utilizing Infrastructure as Code (IaC) practices via CloudFormation to instantly deploy projects to AWS and Kubernetes.
- Reduced known vulnerabilities by 70% through the integration of scanning tools, such as Snyk, SonarQube, and Prisma Cloud, within the Jenkins build and deployment pipelines.
- Increased pipeline adoption by 50% by providing demos, learning sessions, and mentorship to teams as they are onboarded to the pipeline.

Senior Project Engineer   **Mountain Leverage** – Grafton, WV (remote)   Nov. 2021 – Nov. 2022

- Lead architect of the OpsWare Connect platform, delivering a fully integrated Django server, Vue.js web application, and Python voice-directed application for warehouse operations.
- Incorporated websockets and Redis asynchronous task scheduling to provide real-time data and analytics for millions of database records served to hundreds of simultaneous users.
- Managed a small team of 4-6 developers to maintain and improve the OpsWare Connect platform, adding new features and improving response times and total system throughput by 500%.

Senior Project Engineer   **Speech Interface Design** – Pittsburgh, PA   Nov. 2014 – Nov. 2021

- Reduced customer support response times by 50% by providing a log analysis tool with features for log filtering, log highlights, execution time graphs, and voice recognition analysis.
- Designed and modified voice-directed applications and Java backends to implement warehouse operations, including data mapping between hosts, database schema design, and voice application development.
- Improved code quality and reduced bugs by 25% by implementing new processes and tools like code coverage and test-driven development, fostering a culture of continuous improvement.

EDUCATION

Bachelor's Degree in Computer Science   **University of Pittsburgh** – Pittsburgh, PA

Graduated with *Magna Cum Laude* honors.