Chad Van De Hey

San Francisco, CA ● cpvandehey@gmail.com ● chadv.me ● github.com/cpvandehey

Education

University Of Wisconsin-Madison, *B.S. Computer Science,* **May 2016**

Experience

Apple, San Francisco, CA — *Software Engineer (ICT4)*

February 2020 - Present

- **Designed and developed** high-performance Python and Java web services for Apple's education products, leveraging **gRPC & Protobuf** to ensure performance, reliability and consistency.
- **Led and executed** a large-scale migration from bare-metal infrastructure to a **CNCF cloud-native stack**, using **Kubernetes, Helm, Istio, Jaeger, and Spinnaker** with a multi region architecture yielding game changing improvements to deployment efficiency, system observability & robustness.
- **Architected and spearheaded** a migration of Python web services to **AsyncIO**, optimizing performance and reducing latency across **distributed systems**.
- **Established and standardized** Python development tooling across teams, integrating **Pyenv, Poetry, Black, Mypy, Pyright Pipx, and Tox** to enforce consistency, type safety, and maintainability.
- **Defined and enforced** Java development best practices by introducing **Gradle Consistency Versions, Checkstyle, and PMD**, ensuring high code quality and streamlined dependency management.
- **Engineered and delivered cross-platform** client **encryption** libraries, enabling secure data exchange across diverse frameworks/languages while maintaining compliance with industry security standards.
- **Led** and developed a **RAG based AI** solution to search internal documentation and code.

Intuit, Mountain View, CA — *Software Engineer*

June 2016 - February 2020

- **Engineered** catalog management services for Intuit's commerce platform
  - **Java Spring REST APIs, Python Flask, AWS Lambdas**
  - Assisted migration from bare metal to AWS based Kubernetes
  - **Multi-region failover** architectural design & implementation

Technical Skills

Languages and Frameworks

- Extensive programming with **Python & Java**
- API design/implementation experience using **gRPC, REST, & graphQL**
- Backend web development framework expertise in **Django/Flask, Java Spring, NodeJS**
- Python ML tooling experience (**OpenAI, PyTorch, Pandas, Scikit-Learn, Jupyter, FastAI**)
- Asynchronous data processing & ETL experience with Python **Celery, Spark**

Cloud and Miscellaneous Experience

- Infrastructure as code (**Pulumi, Terraform**)
- Deployment, observability & service mesh tools (**Istio/Envoy, ArgoCD, Spinnaker, Open Telemetry, Splunk**)
- Industry standard virtualization using **Docker, Skaffold, and Kubernetes**
- Continuous Integration configuration using **Jenkins, CircleCI and TravisCI**
- Database & queue expertise in **PostgreSQL, Cassandra, Redis, DynamoDB, MongoDB, Kafka**
- AWS DevOps expert (**EKS, EC2, ELB, S3, Cloud Formation, Lambda, and CodePipeline**)