

Alden Page | Software Engineer

Manhattan – New York, NY

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Skills

- Languages **Python, Java**, bash, C/C++.
- Technologies Linux, AWS, Docker, Terraform, Ansible, git, SQL, Django, Kafka, Elasticsearch, OpenAPI, NGINX, OpenCV, PostgreSQL.
- Concepts Software architecture, cloud computing, distributed systems design, network programming, security, parallelism, concurrency, asynchronous programming, event driven programming, complexity management, profiling and optimization, automation, immutable infrastructure.

Experience

- Apr 2018 – present **Creative Commons**, *Software Engineer*, New York, NY (full-time remote).
Building fully open-source systems to catalog and search 1.4 billion Creative Commons works.
- Architected and implemented API server and other back end systems for searching, cataloging, and sharing billions of public works scattered across the internet.
 - Built a custom large-scale polite image crawler which has scraped, thumbnailed, and analyzed half a billion images.
 - Implemented fully automated zero-downtime deployment with autoscaling using Terraform and Docker across all infrastructure.
 - Built a fast indexing system which cut the time to build our search index by several orders of magnitude.
 - Slashed yearly AWS bill and improved system stability by migrating away from Elasticsearch Service to a self-hosted solution on optimized hardware.
 - Manage interns, a team of six external consultants, and the hiring of new developers.
Key tools: Python, asyncio, Graylog, Docker, AWS, Terraform, Elasticsearch, Kafka, Redis, PostgreSQL, Django REST Framework, Linux, bash, OpenAPI
- Jul 2017 – **Block Six Analytics**, *Senior Software Engineer*, New York, NY.
- Nov 2017 A backend systems role at a computer vision startup.
- Architected systems for computing return on investment of advertising in the sports domain.
 - Developed back-end APIs for orchestrating jobs in a computer vision system.
 - Built microservice for authenticating a public facing API.
Key tools: Python, Node.js, NGINX, GraphQL, Terraform, AWS, OpenCV, Flask, OpenAPI, Docker, PostgreSQL
- Sep 2015 – **Deutsche Bank**, *Software Development Engineer*, New York, NY.
- Jul 2017 A hybrid development and devops role with the Equity Derivatives and Prime Finance business lines.
- Developed the server side of a large distributed trading system used to compute risk and PnL on a large number of securities in real-time.
 - Tuned performance and built out features in a high-throughput, low-latency environment.
 - Expanded system to accommodate the unique needs and gigantic scale of prime brokerage business line.
 - Worked on trading floor to gather requirements and solve production issues affecting the front office. Cooperated with numerous other development teams, business analysts, and other stakeholders across the bank.
 - Directed operations teams during production emergencies, system migrations, and major market events (Brexit, 2016 US Election, South Korean impeachment).
Key tools: Java, Linux, bash

Education

- 2011–2015 **Allegheny College**, *Computer Science, Economics (minor)*, Meadville, PA.