

Work Experience

2017–Now **StockX, LLC** • (Remote), *Senior Software Engineer*.

- Scaled software and organizational systems as the 10th engineer, to support 10x traffic and Engineering organization growth.
- Designed, implemented and iterated upon a pipeline for managing dynamic prices on Google Shopping. Almost half of the company's monthly marketing spend is invested in Google Shopping, resulting in it being responsible for a significant percentage of daily sales.
- Piloted full-time remote work for the company.
- Co-lead and assisted in the development of adding continuous integration and deployment (CI/CD) pipelines to all backend services.
- Contributed to the internationalization of the website (i.e., support for multiple currencies and languages).
- Mentored developers transitioning to Go as the company adopted the language on the backend.
- Established and enforced a testing infrastructure and runbook standard for backend services.
- Assisted in creating a centralized wiki to document system intricacies and design decisions.
- Migrated Go services to use a standardized, multi-stage Docker build, reducing Docker image size by 120%.

Technologies

Language(s): Go

Amazon Web Service, SQS, SNS, Lambda, DynamoDB
Docker, Kubernetes, Terraform

Service Oriented Architecture, REST

PostgreSQL, NoSQL (Redis, DynamoDB)

Version Control with Git

Open-Source Software

splitfile: Makes suggestions for splitting Go packages into multiple files to improve readability.

- <https://github.com/mccurdyc/splitfile>

neighbor: GitHub search with arbitrary concurrent acquisition and exploration of open-source projects.

- <https://github.com/mccurdyc/neighbor>

mrstudyr: Retrospectively studying mutant reduction strategies.

- <https://github.com/mccurdyc/mrstudyr>

Publications

2018 **Automatic detection and removal of ineffective mutants for the mutation analysis of relational database schemas**,
Phil McMinn, Chris J. Wright, Colton J. McCurdy and Gregory M. Kapfhammer
Transactions on Software Engineering, 2018.

2016 **mrstudyr: Retrospectively Studying the Effectiveness of Mutant Reduction Techniques**,
Colton J. McCurdy, Phil McMinn, Gregory M. Kapfhammer
Proceedings of the 32nd International Conference on Software Maintenance and Evolution.

2016 **SchemaAnalyst: Search-based test data generation for relational database schemas**,
Phil McMinn, Chris J. Wright, Cody Kinneer, Colton J. McCurdy, Michael Camara, Gregory M. Kapfhammer
Proceedings of the 32nd International Conference on Software Maintenance and Evolution.

Education

May 2017 **B.S. in Computer Science, Allegheny College, Adviser: Dr. Gregory M. Kapfhammer**

- Cumulative GPA: 3.525 / 4.000 In-Major GPA: 3.656 / 4.000

2016–2017 **Best Senior Thesis Award**

A departmental award recognizing a student for writing the best undergraduate thesis.

2015–2016 **Outstanding Junior Major**

Recognizes a junior majoring in computer science who has achieved the highest GPA in departmental courses.

2013–2016 **Alden Scholar (Dean's List)**

Completed a minimum of 30 credit hours and achieving a grade point average of 3.20 or higher.