

RECENT POSITIONS

Senior Data Engineer (Technical lead and Manager)

Apr 2019 – present. Engineering department, 3plCentral, American Fork, Utah.

- Led new data engineer team to create event driven data platform in AWS
- Event driven processing system with Kafka and Faust (async python)
- Multi-tenant relational database to serve as data warehouse
- Order-volume dashboard and inventory reporting flask-based REST APIs
- · Middleware (authorization) using AWS lambda
- Created or modified much of our team's gitlab CI/CD pipeline

Senior Software Engineer

Sep 2014 – present. Engineering dept, Doba Inc. and CruxConnect, Lehi, UT.

- Design and implementation of CruxConnect product and catalog search domains
- Co-architect of CruxConnect's RESTful API
- Parallel processing with async and utilizing AWS serverless architecture
- Integration of AWS tools (Dynamodb, SQS, lambda, etc) into Doba platform
- Multiple supplier and CRM API integrations utilizing SQS and DynamoDB

Assistant Professor of Chemistry and Biochemistry

Mar 2010 - Sep 2014. Chem & Biochem, Brigham Young University, Provo, UT.

- Algorithm and software development for large-scale data analysis
- Computational biology and bioinformatics (e.g., taught computational proteomics)

EDUCATION

PhD in Molecular Biology: Bioinformatics and Computational Biology Track

Aug 2001 – May 2008. Center for Systems and Synthetic Biology, UT Austin.

- Thesis: "Integration and Validation of Mass Spectrometry Proteomics Data Sets"
- GPA 4.00/4.00

Bachelor of Science in Microbiology (Chemistry minor)

Dec 2000. Dept of Biology and Agriculture, BYU, Provo, Utah.

- Magna Cum Laude (3.9/4.0)
- · National Merit Scholar

SELECT PROFICIENCIES

Python (6 yrs), Ruby (15 yrs), Severless framework, Kafka, Faust (async stream processing), SQS, Kinesis, DynamoDB, Elasticsearch, MySQL, Postgresql, Django, Django Rest Framework, Flask, Pydantic, Dataclasses, Numpy/Scipy, Seaborn, SciRuby, Linux (~20 yrs, 11 yrs on Arch), Docker, Rancher and Fargate (docker mgt), Git, Github, Gitlab, Neovim, i3, Bash, Zsh, Cron