Austin Kim

kimaustin19942@gmail.com   https://github.com/austinkim-mbs

San Francisco, CA   https://www.linkedin.com/in/austin-kim-9741b168/

(925) 519-0540   https://austinkim-mbs.github.io/kimx5230.github.io/

EXPERIENCE

Software Engineer at Mammoth Biosciences, Brisbane, CA   Feb 2021– May 2025

- Modernize and establish best practices for frontend - Migrate codebase to React/Redux, implemented CI and tests, generate D3 visualizations (Django, React, Redux, Jest, React Testing Library, D3, Material-UI, REST APIs, CI/CD, Github Actions)
- Implemented distribution for main data pipeline, increasing execution memory constraints from 10GB to 500GB with no increased cost or runtime as well as handling OOM memory leaks. (Python, Prefect, AWS, Terraform, Docker)
- Designed and implemented scalable data taggingdfhcb system that currently tracks data from 200k+ experiments (500k biological samples and 300k variants)

Software Engineer at Workiva, Denver, CO   Aug 2019 – Feb 2020

- Work on canvas audit system
- Conduct Research spikes to develop cross-platform Electron application
- Contribute to code reviews and write unit tests (Mockito, React, Dart)

Fellow at National Institutes of Health, Bethesda, MD   Jul 2017 – May 2019

- Designed and implemented a parallelized sorting algorithm using CUDA and Python - decreased processing time by 30%
- Updated VCF format conversion pipeline and reduced processing time from 1 hour to 7 minutes for a 10GB dataset

Projects
Trend Visualizer

Internal web monitoring application to visualize search logs for the National Library of Medicine. Used FuzzyWuzzy and xlrd for parsing.

Skills
Programming Languages: Java, Python, SQL, JavaScript
Fullstack: SQL, React, Redux, Node.js, REST, GraphQL, SQL, Django
Devops: Docker, Docker Compose, CI/CD, Prefect, Terraform, AWS
Data Science: Pandas, Numpy, Jupyter

Involved Publications

- Daily Sampling reveals Personalized Diet-Microbiome Association in Humans. Johnson, Abigail J. et al. *Cell Host & Microbe*, Volume 25, Issue 6, 789 - 802.e5
- US Immigration Westernizes the Human Gut Microbiome. Vangay,Pajau et. al. *Cell*, Volume 175, Issue 4, 962 - 972.e10