# EXPERIENCE

## Software Engineer (Backend) Creative Juice

May 2021 - Present

- Built and deployed a new backend banking-as-a-service platform managing over 200 funded accounts and \$2MM+ of deposits, built with Spring Boot, Unit Finance, and Plaid.
- Automated loan repayment collection from Google AdSense payments using Pub/Sub messaging and Java microservices, saving 10+ hours a week of human interaction

# Undergraduate Research Assistant Genetic Logic Lab

University of Utah Sep 2019 - May 2022

- Advisor: Prof. Chris Myers
- Implemented a sequence search tool on SynBioHub, an open-source repository for synthetic biology designs, enabling users to search for similar genetic sequences by uploading a genetic sequence file.
- Maintainer for SBOLExplorer, a distributed search tool for genetic parts using Elasticsearch to create an inverted index for faster queries.

#### **EDUCATION**

## University of Utah

Salt Lake City, UT Aug 2019 - May 2022

- B.S. in Computer Science, Minor in Mathematics; 3.85 GPA.
- Dissertation: SynBioHub 3 An Improved Synthetic Biology Repository
- Advisor: Dr. Chris Myers

#### AWARDS

## Best Startup Project HackTheU

Oct 2019

• Created a smart waste management system called HastyWaste using IoT sensors embedded onto garbage bins to collect data for management and optimization of waste disposal routes.

#### **National Merit Finalist**

## National Merit Scholarship Corporation

Jan 2019

• Selected as one of 15,000 students from a pool of more than one million candidates to recieve a college-sponsored scholarship.

## SKILLS

Programming Java, Spring, SQL, Hibernate, Lombok, Mockito Tools Git, Unix, Elasticsearch, Docker, LATEX

Languages English, Mandarin Chinese, Cantonese

#### Talks

- 1. SynBioHub2 Providing an Intuitive and Maintainable Genetic Design Repository, The Thirteenth International Workshop on Bio-Design Automation, Virtual, Sep. 2021.
- 2. SynBioHub3: A Redesigned Parts Repository, Hackathons on Resources for Modeling in Biology 2021, Virtual, Mar. 2021.
- 3. Sequence-based Searching For SynBioHub Using VSEARCH, The Twelfth International Workshop on Bio-Design Automation, Virtual, Aug. 2020.

- PUBLICATIONS 1. Yu, E., Mante, J., and Myers, C. J. (2022) Sequence-based searching for symbiohub using VSEARCH. ACS Synthetic Biology 11, 990–995.
  - 2. Mante, J., Hao, Y., Jett, J., Joshi, U., Keating, K., Lu, X., Nakum, G., Rodriguez, N. E., Tang, J., Terry, L., Wu, X., Yu, E., Downie, J. S., McInnes, B. T., Nguyen, M. H., Sepulvado, B., Young, E. M., and Myers, C. J. (2021) Synthetic Biology Knowledge System. ACS Synthetic Biology 10, 2276 - 2285.