# Eric Yu

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Graduate student at University College London studying Software Systems Engineering, with a background in synthetic biology and financial technologies. Proficient in backend and data engineering, MLOps, and Linux systems, with publications and talks at multiple conferences.

## EXPERIENCE

**Software Engineer (Backend)**
**Creative Juice**                                                    *May 2021 – Apr 2023*

- Developed and deployed a backend banking-as-a-service platform (Spring Boot, Unit Finance, Plaid) that supported over 200 funded bank accounts and $2MM+ in deposits.
- Automated loan repayment collection from Google AdSense payments via Pub/Sub messaging and Java microservices, freeing up 10+ hours per week previously spent on manual collection.

**Undergraduate Research Assistant**                              University of Utah
**Genetic Logic Lab**                                               *Sep 2019 – May 2022*

- Advisor: Dr. Chris Myers
- Integrated a genetic sequence search tool into SynBioHub, an open-source repository for synthetic biology designs, allowing users to perform sequence-based searches via file upload.
- Maintained and enhanced SBOLExplorer, a distributed genetic part search tool which uses Elasticsearch and OpenLink Virtuoso to build an inverted index for faster queries.

## EDUCATION

**University College London**
**M.S. Software Systems Engineering**                               *Sep 2024 – Sep 2025*
- Industry Project (Cisco): A Visual Inspection Tool
- Courses: Validation & Verification, Requirements Engineering & Software Architecture, Engineering Ethics, MLOps

**University of Utah**
**B.S. Computer Science, Minor in Mathematics**                     *Aug 2019 – May 2022*
- 3.85 GPA
- Dissertation: SynBioHub 3 - An Improved Synthetic Biology Repository
- Advisor: Dr. Chris Myers

## SKILLS

**Programming** C/C++, Bash, Python, Java, SQL
**Tools** Git, Spring/Spring Boot, Docker, Kubernetes, Ansible, Terraform, Dagster, 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 SynBioHub 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.** et al. (2021) Synthetic Biology Knowledge System. ACS Synthetic Biology 10, 2276–2285.

## AWARDS

- Best Startup Project, HackTheU                                            *2019*