# Kevin H. Ouyang

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#### Education

**Brown University** 

Providence, RI • Aug 2016—May 2020

Bachelor of Science, Computer Science (Design and Machine Learning)

Honors Thesis: Procedurally Guided Self-Experiments for Novice Health Hackers

**Acquincum Institute of Technology** 

Budapest, Hungary • Aug 2018—Dec 2018

Semester abroad, with coursework in Graphics, Mobile App Dev, UIUX

Recurse Center (f.k.a. Hacker School)

New York, NY ● June 2018—Aug 2018

Summer batch participant in selective, self-directed engineering retreat

**Industry** 

Software Engineer, Anomalo

Palo Alto, CA ● June 2022—Present

• First engineer hired on the new Data Platform team

Software Engineer, Freewheel (previously Beeswax)

New York, NY ● Oct 2020—May 2022

- Promoted to L3 on Nov 2021
- Collaborated with team to deliver new features and maintain stability of data ingestion/delivery system
- Designed, implemented, and maintain data processing pipeline for the launch of time-series forecasting product
- Tech stack is Python, Java, and SQL; Snowflake, AWS Kinesis, Apache Airflow, Druid, Looker

Blockchain Developer Intern, BlockApps

New York, NY • June 2020—Oct 2020

- Contributed to the Identity project, using X.509 certificates to make peer-to-peer node signatures human-readable
- Work in Haskell, Javascript

Software Engineering Intern, Facebook

Menlo Park, CA ● June 2019—Aug 2019

- Working with the Machine Learning Infrastructure team, built a localized version of distributed scheduler (Chronos) that uses Thrift RPC calls to schedule and execute jobs in DAG order with specifiable retry policy
- Designed and implemented a framework for single-box testing to catch interaction errors

## Research

#### **Undergraduate Research Assistant, Brown HCI Group**

Providence, RI • Jan 2019—May 2020

- Second author on paper accepted to CHI 2021: <a href="https://jeffhuang.com/papers/SelfE\_CHI21.pdf">https://jeffhuang.com/papers/SelfE\_CHI21.pdf</a>
- Devised and implemented a novel, data-driven self-experimentation system, Self-E, which scaffolds self-experiment setup, delivers statistical results using Thompson Sampling, and operationalizes data collection and randomized experiment phases.
- Prototyped, and conducted in-person tests of user workflows
- Implemented mobile client and frontend in Android Native (Java)
- Deployed system to the Google Play store to collect real-world user behavior data
- Evaluated Self-E with data from two separate studies

# Teaching Experience

#### CS for Social Change, Brown CS

Providence, RI • Spring 2020

- Undergraduate Teaching Assistant to Professor Ugur Centintemel
- Helped build syllabus by selecting weekly readings and discussion questions about ethics, technology, and policy
- Facilitated in-class activities and discussions; graded assignments for class of 20 students
- Managed a team of 4 students to build an iOS mobile app that provides encrypted mobile storage for journalists and frontline activists to document abuses of state power, such as police brutality and voter suppression

#### Data Structures and Algorithms, Brown CS

Providence, RI • Spring 2018

- Undergraduate Teaching Assistant to Professor Seny Kamara
- Lead weekly sessions, hosted office hours for students, graded student homework
- Departmental mentor for class of 300+ students, with special focus advising 6 students
- Topics covered: recursion, induction, graphs, decision trees, dynamic programming, runtime

### Introduction to Object-Oriented Programming, Brown CS

Providence, RI •Fall 2017

- Undergraduate Teaching Assistant to Professor Andries Van Dam
- Hosted office hours for class 400+ students, conducted discussion sessions for group of 10+ students
- Topics covered: Object-oriented programming, JavaFX, interactive graphics

#### Other

• Spring 2020: Authored 1 of 4 main assignments for graduate-level HCl course

#### Extracurricular

Student Diversity Advocate, Brown CS Department Workshop Facilitator, Third World Transition Program Peer Advisor,, Meiklejohn Peer Advising Mentor, Brown Asian American Mentoring Program iProv Fellow, Swearer Center

Jan 2019—Jan 2020

Aug 2019

Aug 2017—May 2018

Aug 2017—May 2018

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June 2017—Aug 2017

- Recipient of fellowship to intern with Rhode Island Coalition for the Homeless on a team that specializes in LGBTQ youth homelessness
- Built and designed organization website
- Collected data about LGBTQ youth homelessness in Rhode Island
- Gained social work exposure through street outreach trainings and sessions

#### **Skills**

**Languages and frameworks:** Python, R, GoLang, Haskell, Java, Git, Tensorflow, Snowflake, Apache Airflow, AWS (Cloudwatch, Kinesis, S3), Software Engineering, Data Engineering, Mobile development (Android), User Testing, Wireframing, Design Thinking

# **Highlighted Coursework**

Human-Computer Interaction (graduate level), Critical Video Game Studies, User Experience Design (AIT Budapest), Deep Learning, Machine Learning, Real Analysis, Abstract Algebra, Distributed Computer Systems, Statistical Inference