Kevin H. Ouyang

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EDUCATION

Brown University ● **Sc.B Computer Science** Aug 2016—May 2020
GPA 3.7 // 4.0

Highlighted Coursework: Computer Systems, Distributed Systems, Mobile Software Development, Data Structures and Algorithms, Deep Learning, Machine Learning, Human-Computer Interaction, Statistical Inference, Linear Algebra

SKILLS

Backend Development, Python, Haskell, Go, Javascript, C, Java, Git, Mobile Development (Android), Blockchain

EXPERIENCE

BlockApps

Blockchain Development Intern, STRATO Platform June 2020—Present

- Contribute to the Identity project; implementing X.509 certificate requests to license new P2P nodes
- Work in Haskell, Javascript, and Docker

Human-Computer Interaction Research Group at Brown

Research Assistant Jan 2019—June 2020

- Investigator on the Self-E project; used Design Thinking process to take Self-E from ideation phase to a working, fully-implemented user system
- Lead developer for the Android mobile app that guides users through running custom self-experiments
- Co-author on paper to be submitted September 2020

Facebook

Software Engineering Intern, Machine Learning Infrastructure June 2019—Aug 2019

- 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 that arise between distributed components of Facebook's ML ecosystem

Brown University Computer Science

Teaching Assistant, Data Structures and Algorithms; Object-Oriented Programming Aug 2017—May 2018

- Lead weekly section, hosted office hours, graded homework for class of 400+ students
- Topics covered: OOP, JavaFX, interactive graphics, recursion, graphs, decision trees, DP, runtime analysis

PROJECTS

Self-E: To learn more and download the app, visit **selfe.cs.brown.edu**

GNN: Built a message-passing graph-based Neural Network that detects whether particular molecules are active against cancer with a 72% accuracy. Implemented using PyTorch.

PuddleStore: Developed fault-tolerant distributed file system capable of basic file system operations. Uses Tapestry as DOLR, Apache Zookeeper as membership server, and Raft to ensure strongly consistent updates. Built in Go.

eMochi, *2nd place Winner at MIT Hacking Arts 2017*: Built a serverless backend with AWS and lambda functions to serve chatbot responses based on collected user data; wrote and presented the pitch to the judge panel.