# MAGGIE LOU

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## EDUCATION

Northwestern University | McCormick School of Engineering

Bachelor of Science Degree | Computer Science

- Cumulative GPA: 3.88/4.00
- Murphy Scholar (Grant to pursue technology research, weekly seminars by Northwestern research faculty)

**Upper-level Coursework:** Algorithms; Design, Technology, and Research; Software Construction; Operating Systems; Networking; Computer Systems, Databases, Programming Languages, Human-Computer Interaction, Machine Learning **Skills:** Java, C++, Ruby on Rails, R, Python, SQL, HTML/CSS, JavaScript, Node.js, Swift (beginner)

#### **EXPERIENCE**

#### **Braintree Payments**

Software Engineering Intern, Product Expansion

• Wrote production-level code in Ruby on Rails to expand processing in Australia to handle billions of transactions per year; worked with Kafka, Postgres, and Amazon S3, with a focus on test-driven development and pair programming

## Software Engineering Intern, Cloud Infrastructure

- Added Kubernetes to Braintree's tech stack to automate application deployments and scaling, improve resource allocation, and efficiently respond to customer demand; committed production-level code in Go, Python, and Ruby
- Developed internal developer tools like a SlackBot to notify teams of their failed deployments and alert on unhealthy metrics reports; work included configuration, deployment, testing, and documentation

#### Delta Lab

Undergraduate Researcher

January 2018 - Present

March 2017 – Present

• Researching last-mile obstacles in 'on-the-go' physical crowdsourcing systems in which helpers deliver packages with minimal disruption to their everyday routines; conducting user research and working with Node.js and Swift

#### Over

Software Engineering Intern

- Created a KPI dashboard using Ruby on Rails to establish a baseline for company goals and promote transparency
- Developed the beta version of an iOS feature that uses image recognition to generate clever captions for images

## Women in Computing

External President

- Mentoring and directing a 10-person exec board and 100+ member organization
- Designed a sponsorship package and raised over \$12,000 in funding from 6 partner companies, quadrupling our organization's budget to empower members through community building, professional development, and tech talks

#### **PROJECTS**

ByteSize (Swift) – iOS application to coordinate crowdsourced on-the-go food delivery MeetMe (Javascript) – Google Calendar integrated meeting scheduling application Tsuro (Java) – networked bot for the Tsuro board game

Escape (R, Swift) - iOS application to generate travel itineraries based on user interests, location, and schedule

## **ADDITIONAL**

Languages: English (Native), Mandarin (Intermediary), French (Basic Conversation)

Activities: Delta Gamma Sorority, Society of Women Engineers, Alpha Kappa Psi Business Fraternity, Computer Science TA Interests: Product Engineering, Physical Crowdsourcing, Travel, Skiing, Exotic Foods, Photography, Adrenaline

#### orogramming

Summer 2018

Evanston, IL

Expected Graduation: June 2019

# Summer 2017

# Summer 2010

## Summer 2016