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EXPERIENCE

- Jul '20 – Sep '20 **Apple** – AI/ML Engineering Intern **Seattle, WA**
- Conducted a user study to answer key questions and determine metrics for eye tracking on mobile devices
 - Implemented an algorithm for dynamic eye tracker recalibration based on existing system interactions
 - Designed a system for pre-loading asynchronous content using interest prediction derived from gaze data
 - Demoed a proof-of-concept of intelligent UI element selection, leveraging gaze data and voice input
 - Created a reusable iOS launch daemon for study control and data collection in future studies within Apple
 - Developed a modular iOS gaze framework, facilitating the development of future gaze-powered experiences
 - Presented my project's findings to organization executives and team leads with positive reception
- Jan '20 – Mar '20 **Facebook** – Software Engineering Intern **Menlo Park, CA**
- Designed new system-wide interfaces and notification flows to enable relevancy- and permissions-based forwarding to a profile's assigned administrator roles for a major upcoming product release
 - Collaborated with multiple teams to design these new features to fit well with existing infrastructures
 - Implemented these additions on both the backend (Hack, GraphQL) and frontend (JavaScript) first using a mock API and switching to the real API upon completion. Also created extensive unit & integration tests
 - Worked with the QA team on performing a notification audit to ensure intended product behavior
- Sep '19 – Dec '19 **Xevo** – SDE I - AI UX (part-time) **Seattle, WA**
- Jun '19 – Sep '19 – SDE Intern
- Collaborated with the data science team on in-house tools to congregate and visualize user telemetry data
 - Worked on developing SQL/Python transformation scripts and jobs to transform raw user telemetry into tangible data points for future use predictive machine learning models
 - Designed and implemented a Snowflake/AWS pipeline to take processed telemetry data and determine user points of interest via a reverse geocoding service running periodically on a Node.js Lambda
 - Developed a DBSCAN-esque MySQL clustering algorithm to generate high-order insights (patent pending)
 - Gained experience in Snowflake, AWS, Python Flask, Terraform, Docker, K8S, Mixpanel, and more
- Jun '18 – Sep '18 **Lime** – Software Engineering Intern **San Francisco, CA**
- Led a complete redesign of the iOS app UI, unifying and simplifying the company design language
 - Implemented a persistent rating system, increasing usage by 15% and enabling new performance metrics
 - Refreshed the in-app referral system to use Branch.io deep links, increasing key user acquisition metrics
 - Designed and programmed an in-trip zones interface, leading endpoint refactoring efforts to allow for warning users of potential fines that could be faced based on no-service and no-parking zones
 - Led design and implementation efforts of a backend-driven animated 'how to ride' screen, allowing for per-region rules and regulations and helping the government relations team meet per-city requirements

PROJECTS

- Aug '17 – Present **Weightlifting App** – iOS App Store
- Tracks and analyzes users' workouts using Amazon Web Services, Core Data, and more
 - Developed a Node.js backend running on AWS EC2 for app leaderboards, feedback, and user backups
 - Designed a Keras deep neural network (exported to CoreML) to predict user workout names
 - 14k+ installs, 1.8k+ MAU, 4.7 star rated, top-10 weightlifting app
- Aug '16 – Jan '19 **Homework App** – iOS App Store
- Organizes, keeps track of, and reminds users of upcoming homework. Acquired by Haystack AI on 1/23/19
 - Upon acquisition: 338k installs, 63k MAU, 4.7 star rated, #1 global homework app, top-60 productivity app

EDUCATION

- 2017 – Present **University of Washington** **Seattle, WA**
- Senior at the Paul Allen School of Computer Science & Foster School of Entrepreneurship Minor. Eight-time Dean's List recipient. Courses include: CSE 311/2, CSE 331/2/3, CSE 341/4, CSE 351, CSE 473; GPA: 3.84
- 2013 – 2017 **Thomas Jefferson High School for Science & Technology** **Alexandria, VA**
- Nationally ranked magnet school. Developed semi-autonomous go-kart in senior Automation & Robotics lab. Courses include: AP CS (5), Artificial Intelligence I & II, Analog & Digital Electronics; ACT: 33, GPA: 4.3

SKILLS

- Programming capability in C/C++, Objective C, Swift, JavaScript/TypeScript, Python, Java, SQL, PHP/Hack, HTML
- Proficient with GitHub/GitLab/Bitbucket, Jira, Slack, Adobe CC (Photoshop, Illustrator), Google / Microsoft Office Suites
- Experience with AWS (S3, DynamoDB, Lambda, IAM etc.), Google Cloud (Compute, Datastore, Endpoints), Snowflake, Terraform

PERSONAL

- Boston & DC sports fan, five-time Tough Mudder finisher, two-time century bike finisher, occasional mountain climber
- Brother at Delta Tau Delta – Gamma Mu chapter, four-year high school basketball player, avid weightlifter and nutritionist