Howard Wang

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EDUCATION

UC SAN DIEGO
BS in Computer Science
Expected 2021 | San Diego, CA
Major GPA: 3.72

LINKS

Personal:// h-wang.me
Github:// hwanggit
LinkedIn:// hwangprof

SKILLS

Languages
C++ • Java • Javascript
PHP • CSS • HTML
GraphQL • Python • Swift

Software/Tools
JQuery • Git • React Native
React • Django • SQL
Unix • Google Cloud • Unity

AWARDS

Placed **3rd out of 20 teams** in
UCSD **IEEE Quarterly Projects**
Competition

Placed **3rd out of 25 teams** in
Calgary **Mayor's Youth
Council** Hackathon 2017

COURSEWORK

P/NP Algorithms
Java/C++ Data Structures
Data Science with Python
ARM Assembly Language
Computer Architecture
Unix Scripting

EXPERIENCE

SOFTWARE ENGINEER | Vibely Inc.
July 2019 - Present | Menlo Park, CA

- **Full-stack mobile** engineer at **Forbes-featured IRL meetup services** company
- Shipped **20+ features** for **viral** groups **Subtle Asian Traits, Girls Gone Global**
- **Doubled user retention** and **tripled user acquisition** over **3 months**
- Developed **flagship features** like **notification toasts**, animated **drag-down menus**, navigation **toolbars**, **authentication** flows, **forms, user search**, 10 more
- Wrote **GraphQL queries & mutations** with resolvers to **fetch/update database**
- Employed **agile development** in a **scrum** setting and **tracked sprints in Trello**
- Utilized **Git and Fastlane** for **mobile DevOps** and **Circle CI** to **maintain CI/CD**
- Tools: **React Native, TypeScript, GraphQL, AWS RDS, Branch.io, OneSignal**

LEADERSHIP

PROJECT CHAIR | Institute of Electrical & Electronic Engineers
June 2019 - Present | San Diego, CA

- Proposed **$10,000 budget** to fund **3 project competitions** for UCSD students
- **Managed 30+ teams** to create **marketable** hardware/software **products**
- Developed **Django-SQL dashboard web app** to automate **administrative** tasks
- Acquired **sponsorships** from **Texas Instruments**, SES, and the **ECE department**

RESEARCH

RESEARCH ENGINEER | Smartfin (Engineers for Exploration)
April 2019 - June 2019 | San Diego, CA

- Worked in a **team of 4** to **model the behaviour of ocean waves** using Python
- Developed **algorithm to model wave direction** using **Kalman filter** on **IMU** data
- Utilized **Python Scikit ML** algorithms in **Jupyter console** to **label** wave features
- Created **Github wiki** with **Markdown** to catalog Smartfin **research reports**

PROJECTS

EASY TOUR | Emotional Tourism (LA Hacks 2018)
March 2019 | Los Angeles, CA

- **Javascript** web app that **selects tourist hot-spots** to **render an interactive trip**
- Labeled **Flickr images** with **emotional content** & geolocation via **Google Vision**
- Developed **Mapbox UI layers** and **search features** using **HTML, CSS, JQuery**
- Tools: **Node.js, HTML, CSS, Javascript, PHP, Google Vision, Flickr, MapBox**

C++ DATA STRUCTURES | Coursework (UC San Diego)
Sept 2018 - June 2019 | San Diego, CA

- Implemented **bit-size Huffman algorithms** to **compress and decompress** files
- Trained **multi-dimensional KD tree KNN classifier** with **over 70% accuracy**
- Built **multi-edge graph** and **MST** using **unordered maps** and **disjoint sets**
- Developed **Multi-way Trie** algorithms for **prefix search** and **autocomplete**
- Tools: **C++, C, GDB, Vim, Valgrind**

HACKEYE.IO | Hardware iOS App (Founder)
July 2018 | San Diego, CA

- **Hardware collab app** shows nearby **Hackaday.io projects** for tech-enthusiasts
- Built **Yelp-like UI** with **Swift/Xcode** and created **location service from scratch**
- Tools: **Swift, Objective-C, Hackaday API, CoreLocation, Xcode**