

JUNHAO WANG

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EDUCATION

University of Southern California, Los Angeles, CA

M.S. in Computer Science

Aug. 2019 ~ May. 2021

GPA: 3.70 / 4.0

Israel Institute of Technology (Technion), Israel

Summer Program of Machine Learning (awarded scholarship of half tuition)

Jul. 2017 ~ Aug. 2017

Top 15%

Shantou University, China

B.E. in Computer Science and Technology (first-class scholarship twice)

Sep. 2014 ~ Jun. 2018

GPA: 3.74 / 4.0, Top 2%

SKILLS

Editing Languages

Markdown, MathJax

Programming Languages

Java, C, C++, Python, Objective-C, MATLAB

Writing & Problem Solving

LeetCode Book [Website]

Development Tools

VSCode, Emacs, IntelliJ, PyCharm, CLion, Xcode, Git, Unity

SELECTED PROJECTS

Campus App: Connect Everyone at STU (Objective-C) [Website] [App Store]

Oct. 2015 ~ Aug. 2017

Team Leader of 3 Members, Co-Founder, iOS Developer, UI Designer

Aitouda Team

- Invented the project *Campus App* to help students and faculties put school information and resources at their fingertips.
- Developed an *iOS* app in 2 months and released 14 versions on *App Store* with a 4.7/5.0 rating and 10,000+ users.
- Conducted surveys on requirement analysis and built 15+ features such as course schedule customization, mobile library, etc.
- Practiced design patterns (*MVC*, *Singleton*) and used *CocoaPods* to manage 15+ libraries (*KVNProgress*, *UmengSDK*).
- Ranked 7th out of 300+ apps in the *First China iOS App Development Competition* in 2017.

Save Mr. Marx App: Social Science Test Preparation (Objective-C) [Website] [App Store]

Nov. 2016 ~ May. 2017

Team Leader of 5 Members, Co-Founder, iOS Developer, UI Designer

Aitouda Team

- Extended the final project in *Software Engineering* course to help students learn and enjoy social science knowledge.
- Created an *iOS* app in 1 month and released 4 versions on *App Store* with a 4.6/5.0 rating and 4,500+ users.
- Designed intriguing features (an online leaderboard, two study modes, daily challenge) to enhance learning experiences.
- Implemented a backend system on a small-scale cloud platform *Bmob* to store user information and question set data.
- Ranked 5th out of 300+ apps in the *First China iOS App Development Competition* in 2017.

OTHER EXPERIENCES

Design of Key Frame Extraction from News Videos (Python, MATLAB)

Mar. 2018 ~ Jul. 2018

Graduation Project & Thesis

Shantou University

- Researched into methods of key frame extraction, shot boundary detection, and story separation for daily news videos.
- Trained linear *SVM* and neural network models to classify frame types and proposed feasible noise reduction techniques.
- Implemented, compared, and evaluated shot boundary detection algorithms (*Histogram Difference*, *Edge Change Ratio*).
- Awarded *Outstanding Undergraduate Graduation Thesis* in 2018.

Mouse Track Captcha System (Python, MATLAB) [Website]

Jul. 2017 ~ Aug. 2017

China Collegiate Computing Contest, Big Data Challenge

Tencent Co. Ltd

- Preprocessed real-world mouse-tracking input by data cleaning and transformation (normalization) to prepare features.
- Compared and analyzed performance of backpropagation neural networks and boosted decision tree models.
- Trained an *XGBoost* classification model, obtained 89.7% precision, and ranked top 12% in the contest.

Roundabuy: HK Brands Shopping (Objective-C) [App Store]

Jan. 2015 ~ Feb. 2015

Software Engineer Intern

BeVoid Ltd HK

- Developed an early-stage prototype application that provides a digital market place for people to explore products.
- Collaborated with a designer to implement a frontend user interface on *Storyboard* and used *Auto Layout* system in practice.
- Applied third-party frameworks (*ASIHTTPRequest*, *AFNetworking*) and encapsulated their *APIs* to reduce duplicate code.
- Communicated with my team via cooperation tools (*GitHub*, *Slack*) and contributed constructive ideas during weekly seminars.
- Awarded HK\$ 100,000 from *Creative Micro Fund* in an entrepreneurship competition organized by *Cyberport HK*.