Yen-Hsuan Chen （Terry）

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EDUCATION

University of Southern California, *Los Angeles, CA*   *Aug. 2016 – May. 2018*
M.S. in Computer Science (GPA: 3.77/4.0, Expected graduation: May 2018)
Courses: Web Technology, Database, Computer Network, Algorithm, JAVA OOP, Artificial Intelligence and Mobile Game Design.
National Chiao Tung University (NCTU), *Hsin-Chiu, Taiwan*
M.S. in Electrical Control Engineering (GPA: 4.3/4.3 with Honors)   *Sep. 2011 – Jun. 2013*
B.S. in Electronic and Computer Engineering (GPA: 3.93/4.3 with Honors)   *Sep .2007 – Jun. 2011*

TECHNICAL SKILLS

- **Languages**: JavaScript(ES5/ES6), Java, C/C++, Python, HTML5/CSS3, Sass, Typescript, PHP, SQL, Swift.
- **Frameworks:** Angular, React.js, React-redux, AngularJS, Express.js, Socket.io, Bootstrap.
- **Platforms & Tools:** Node.js, Redis, MongoDB, PostgreSQL, RabbitMQ, Apache, NginX, Docker, Chrome DevTools, Git, AWS.

WORK EXPERIENCE

FullStack Developer Intern   *Jun. 2017 – Jul. 2017*
Jibao
- Developed education-learning-card generator service that integrates Google Knowledge API, Pixabay Image API, and Wikipedia API by using **React.js**, **React-redux**, **Node.js**, **Keystone.js** and **AWS**.
- Implemented web notification push system supporting real-time delivery of messages to users by using **Web socket**, **polling Ajax**, **RESTful API**, **Node.js** and **MongoDB**.

Research Intern   *Jun. 2010 – Aug. 2013*
Brain Research Center, National Chiao Tung University
- Collaborated with U.S. Army Research Lab to developed real-time drowsy driver monitoring and prevention system detecting drowsy drivers, using wireless wearable electroencephalogram (EEG) devices that integrate with **Android** platform.
- Designed virtual reality experimental environments, acquired EEG data, and implemented drowsiness estimation system by using **SVM** learning models with high prediction accuracy (~93%).
- Built signal processing and **noise-cancellation** software for wireless EEG devices based on **PCA**, **ICA** algorithm using **Java**.
- Published research article in IEEE Transactions on Biomedical Circuits and Systems.

PROJECTS

Collaborative Docs   *July. 2017 – Oct. 2017*
- Built single page application with **Angular** and **Bootstrap**, which supports users to create documents and work together.
- Designed a chat panel allowing users to communicate in real-time (**Node.js**, **Express.js** and **Websocket**).
- Implemented collaborative document editor with **Quill.js** and **Socket.io** that support users to edit text, insert images, and embed online videos in documents.
- Built online document storage service by using **RESTful API**, Node.js, and **MongoDB**, and deployed the project on **AWS EC2.**

Top News - News Scraper and Classifier   *Apr. 2017 – Aug. 2017*
- Built a single page application based on **React.js** and **Node.js** for users to read latest news, and deployed the projects on **AWS**.
- Designed a data pipeline that can monitor and scrape news from different news websites (**RabbitMQ**, **Redis**, and **MongoDB**).
- Implemented **SVM** and **Naïve Bayes** classifier using **NLTK** to train News Aggregator Data Set (from UCI ML Repository), and created an online classifying service for news topic modeling.
- Built a user-click event processor (**Python RPC server**) collecting users' click behaviors and update news preference for users.

Google Chrome Extension - Productive Start Page   *Jul. 2017 – Aug. 2017*
- Implemented an elegant speed-dial tab extension supporting users to get instant access to websites and chrome services.
- Built customizable UI integrating shortcuts, bookmarks and apps based on **Angular**, **Sematic UI** and **Google Chrome API**.

Online Code Judge System   *Apr. 2017 – Jun. 2017*
- Implemented web-based collaborative coding system on **AWS**, which allows users to create/join private coding room, to execute **Java/C++/Python** codes online, and to edit codes simultaneously.
- Built source code executor which compile and execute user's code. (**Docker**, **Python-Flask**).
- Developed single-page web application for login, online coding editor, and user interface by using **Angular** and **Socket.io**.
- Designed **RESTful API** to transmit results of compiled user codes between client web apps and **Node.js** server.

Facebook Search Tool   *Feb. 2017 – Apr. 2017*
- Implemented single page application to perform Facebook search based on **AngularJS** framework.
- Designed **RESTful APIs** to transmit query and search results using **PHP** and **FB Graph APIs**.
- Built **iOS client application** for mobile users by using **SWIFT**.
- Developed **responsive search UI** using **jQuery/Bootstrap** and deployed website on **Elastic Beanstalk (AWS)**.