

THOMAS (HONGJIAN) YANG

+1 (646) · 361 · 6956 ◊ hy457@cornell.edu ◊ thomas-yang.me

EDUCATION

Cornell Tech *New York, USA* Fall 2015 - Present
Master of Information System, Connective Media
Selected Course: Startup Systems Design and Engineering, Applied Machine Learning, Independent Study on Human-Computer Interaction, Optimization Methods

Peking University *Beijing, China* Fall 2011 - Fall 2015
Bachelor of Science, Computer Science
Selected Course: Information Visualization, Operating Systems, Compilers, Computer Networks, Analysis of Algorithms, Web Development, Human-Computer Interaction

AWARDS

Outstanding Intern Award, Microsoft Research Asia (Top 10%) 2014
President Fellowship, Peking University 2014
Jacobs Institution Masters Fellowship, Cornell Tech 2016

RESEARCH EXPERIENCES

Cornell Tech Enhancing Ability Lab, Independent Study September 2015 - December 2015
Research on a novel text editing method using speech (MongoDB, Node.js, Express, Web Speech API) New York, NY

- Built a RESTful voice-to-text server using **ExpressJS** and Google Voice Recognition.
- Built an interactive questionnaire webpage to collect users' voice, apply to our method and store results in **MongoDB**.

Peking University Visualization Lab, Research Intern May 2013 - March 2014
Researched on tracing individuals by their Wi-Fi login records on different adapters (JavaScript, D3js) Beijing, China

- Designed a visualization to display this Wi-Fi dataset as trajectory animation on map, using **D3js**.
- Implemented playback controls and a moving flow chart on timeline showing the number of people on the map.

EMPLOYMENTS

Plated May 2016 - August 2016
Engineering Intern (Ruby on Rails, Node.js, React, Amazon Alexa, Amazon Lambda, DynamoDB, Web Speech API) New York, USA

- Worked as the first international engineering intern.
- Built a voice assistant web app for Plated recipes using **Node**, utilizing **Amazon Alexa** for voice recognition, **Amazon DynamoDB** for data storage, and **Amazon Lambda** for deployment.
- Built front end interface to display images and texts for the voice response, using **React**.
- Wrapped up internal API and built **Node** version SDK.
- Visualized recipe steps on a timeline for better user experience, using **D3js**.

Beijing Spark Co. Ltd. March 2015 - July 2015
Front End Developer (Ruby on Rails, Postgress, Backbone) Beijing, China
Created social networking service for entrepreneurs.

- Refactored front end to applied MVC model using **Backbone**.
- Built severnal **Rails** models (user, question, answer, comment), setup **Postgress** for storage.
- Implemented login process with role based authentication.

Beijing Giraffe Tech Co. Ltd. February 2014 - February 2015
Co-founder (Android, UI, JavaScript) Beijing, China
Created smart wearable devices to help users get a better sitting posture.

- Designed and built product website and applied parallel scrolling using **jQuery** and **Semantic UI**.
- Created multiple infographic views for our Android App to present users' data on the device.
- Wrote a module to connect and synchronize data from our device to our Android App.

Microsoft Research, Asia April 2014 - October 2014
Engineering Intern (Information Visualization, Storytelling, JavaScript, D3js) Beijing, China

- Developed a graphic morphing library (**line interpolation, customized animation**) for a data driven storytelling system based on **HTML5 Canvas**.
- Built a data analysis and visualization tool (**timeline controls, interactive scatterplot, WYSIWYG SVG editor**) for huge temporal dataset using **D3js**.

TECHNICAL SKILLS

Languages	CoffeeScript/JavaScript/TypeScript, Ruby, C/C++, Java(Android), Python, PHP, Lua
Front end development	React, Polymer, Backbone, D3js, JQuery, Bootstrap, Mocha, Chai, Pug, Stylus, Gulp, Webpack
Back end development	ExpressJS, Ruby on Rails, Django, Flask, Nginx, MongoDB, Postgress
Miscellaneous	Shell, Prototyping, Git, Vim, CI, L ^A T _E X