









EXPERIENCE

NEXTLEAPINC FOUNDER

Sep 2016 - Present Cloud platform that provides easier ways to connect and automate your IoT and internet

services. Designed the entire platform, including rich text editor, and a JavaScript analyzer

that does complex syntax analysis, semantic analysis and type inference.

SeamlessDocs SENIOR ENGINEER

Mar 2016 - Sep 2016 Lead developer responsible for building complex record management system; redesigned the

architecture of the next generation front-end application using React, Redux and Flow. Designed the workflow automation system, redux API middleware, OAuth authorization.

Mentored Junior engineers and provided sustained React training for staff.

CODE DIRECT FOUNDER, CEO

Apr 2015 - Mar 2016 Provided web app solutions, outsourcing and consultation, including project architecture and

strategy as well as guidance on critical technical decisions; rescued web projects stuck on tough technical issues or facing unexpected roadblocks. Primarily on React.js related projects.

Autonomous TEAM CAPTAIN, LEAD PROGRAMMER

Vehicle Project Raised funding, recruiting, coordinating tasks and direct project goals.

University of Minnesota Dec 2013 – Dec 2015

Designed robot architecture, installed ROS on Nvidia TK1 and created project template.

Implemented most part of the SLAM algorithm, communication protocols across ROS, Kinect,

LIDAR and IMU. Rebuilt a customized AHRS system of APMrover on PixHawk.

Finished top ten at the Sparkfun Antonymous Vehicle Competition and RoboGames 2015.

Tesla Works PROJECT MANAGER

University of Minnesota
Jan 2014 – Sep 2015

Directed project goals, coordinated and scheduled tasks, and archived timelines. Turn cool

ideas into reality; trained and mentored students in programming and engineering skills.

UCICA WEB DEVELOPER

May 2012 – Oct 2013 Designed and deployed the association website. Regularly updating contents.

Santa Monica College PROGRAMMING TUTOR

Apr 2011 – Jun 2013 Student's most favorable tutor. Increased students sign up rate by more than 100%.

SKILLS

WEB DEVELOPMENT

JavaScript ES7, Typescript, Flow, Polymer, RxJS, Bootstrap, THREE.js, canvas, express.js, koa.js, Webpack, Gulp, Babel, Sass, PostCSS.

Strong knowledge of React.js lifecycle, virtual DOM, reconciliation and React internal mechanisms.

Comprehensive experience in architecting large-scale front-end projects and scalable web APIs.

ROBOTICS

11+ years of experience building robots with C/C++/Python and circuit design.

Experience in researching, designing, developing, testing and optimizing robotic systems.

Skill in implementing Simultaneous Localization and Mapping algorithms, computer vision algorithms, motion planner and communication protocols.

ADDITIONAL

Solid foundation in mathematics, statistics and theoretical computer science.

C, C++, JavaScript, Python, Swift, Java, OCaml, F#, SML, MATLAB, GLSL etc.

Strong understanding of functional, functional reactive, and object-oriented programming, compiler design, statistical Robotics, Image Processing, Perspective Geometry.

Ability to work in both software and hardware realms; experience with micro-controller and circuit design knowledge with PCB crafting experience and broad range of sensors.

Fast prototyping, building minimum viable product for startups and hackathons.

AWARDS AND ACTIVITIES

Contributed to many large open-source projects.

1st place in 10000makes makethon.

7th place in RoboGames.

2nd place in ACM International Collegiate
Programming Contest Upper Mid-West region.

MinneHack Mentor; ACM UMN student Chapter Officer, Web Master; Member of Triangle Fraternity, IEEE, GOFIRST Robotics, NSPE, CoLab.

Founder and President, Santa Monica College Robotics Club.

2 First prize in Adolescents Science and Technology Innovation Contest (China).

2 medals in National (China) and 5 First Prizes in regional high school robot competition.

Research of Parallel Distributed Neuron Network Integration Theory, Awarding Program for Future Scientists.

2 patterns, Robotics team founder, captain and coach, best Warcraft 3 player in High School.