

EXPERIENCE

- Professional developer in JavaScript (Node.js), Rust, Python, C, and Java; eager to learn new languages and tools
- Experience in server deployment, front-end and back-end web development, embedded development with micro-controllers and sensors, creating developer tools, API design, and mobile development. Passable at Photoshop.
- Cross-platform PC development across OS X, Windows, and Linux
- Active open source contributor on Github (handle is @tcr)

EMPLOYMENT

3D Robotics, Software Engineer

June 2015 – July 2016

- Owned DroneKit Python, an open-source SDK for the Solo drone for wayfinding and autonomy; led major product rewrite based on internal product requirements, improved development speed and reliability; incorporated major release into consumer firmware; exposed tooling integrating drone simulations as part of CI
- Shipped the R10C sensor enabling high-resolution photography for mapping; wrote drivers to handle geolocation-triggered photo capture, including processing live video on a memory-constrained embedded system
- Designed platform for drone accessories, developed both in-house and by third parties; authored engineering guidelines for 3rd party camera integrations
- Handled community outreach for Solo development, including issue triage and contributions; added compatibility with alternative autopilot kernels and delivered cross-platform support;
- Authored comprehensive guide for Academic, Hobbyist, and App developers to leverage Solo as a platform

Technical Machine, Co-Founder

April 2013 – April 2015

- Co-Founded company; grew to eight employees, three interns over life of company in Berkeley, CA
- Launched Tessel, a platform enabling software developers to prototype and deploy hardware designs
- Developed a specialized JavaScript runtime for embedded devices
- Grew our platform into open-source Tessel Project, joining and stewarding its Steering Committee

Game Closure, Software Engineering Intern

Summer 2012

- Joined team to team to develop features for high-performance cross-platform game engine based on HTML5
- Created specifications and implemented Node.js development tools

Microsoft Inc., Program Management Intern

Summer 2011

- Developed specifications for integrating CLR compiler toolchains into Windows Phone Marketplace backend; worked across multiple teams to assess feature requirements; developed implementation proposal

Intuit Inc., Software Engineering Intern

Summer 2010

- Rewrote mobile app for GoPayment, a mobile payment solution for small businesses, for new Blackberry OS

EDUCATION

Franklin W. Olin College of Engineering, Needham, MA

2013

Bachelor of Engineering w/ Concentration in Computing

- Coursework: Computer Architecture, Foundations of Computer Science, Mobile Application Development, Principles of Engineering, Real Products Real Markets, Fundamentals of Business and Entrepreneurship, Modeling and Simulation of the Physical World, Modeling Control Systems
- Co-taught *Olin.js*, a class in modern web development focusing on Node.js and HTML5
- Founded the student group *SLAC* as Olin's largest computer science & creative community