

Varun Ramesh

varunramesh.net | github.com/rameshvarun

Objective Software engineering internship in developer tools, web, mobile, or graphics.

Education **Stanford University** - B.S. in Computer Science (Expected 2017) GPA 3.98
Coursework: Game-Playing AI (CS227B), Networks (CS144/CS244), OS (CS140), Crypt. (CS255), Languages (CS242), DBs (CS145), ML (CS229), Compilers (CS143), Security (CS155), Num. Methods (CS205A), AI Principles (CS221), Algorithms (CS161/CS168), Offline & Real-time Graphics (CS148/CS248), Comp. Systems (CS110/CS107), Probability (CS109), Logic/Automata/Complexity (CS103)

Work Experience **Facebook Intern (Menlo Park) – Summer 2016** – Pages Android team. Developed a new, native version of the Insights tab used by page authors to track stats. **Summer 2015** – Nuclide team. Developed an RPC framework for JavaScript that parses module source, automatically generating network calls from AST.

Sourcegraph (Code Search Engine) Intern (San Francisco) - Summer 2014 - Dev lead on Atom editor plugin. Implemented Java syntax tree indexing. Added functionality to Golang backend. Defined a schema for language-independent define/use chains. Created [srclib.org](#).

TGen Biocomputing Intern (Phoenix) - Summer 2013 - Wrote Python/R scripts to classify tumors using metabolic pathways. Generated Bayesian networks from gene interaction data, saved to graph DB. Created app with Node/Mongo/Redis to traverse empirical and computational interactions. **Summer 2012** - Created tools in C++ using OpenMP, and parallelized legacy code in tumor analysis pipeline. Open-source at: [goo.gl/KDJozb](#)

Student Research at ASU - 2010/2011 - Developed Python app to assist blind - OpenCV to detect facial expressions, signaled vibration patterns on haptic glove. Programmed servo-mounted camera to follow faces.

Projects **AI** – Automated greyscale image colorization. Pokémon battle AI. Hnefatafl game AI.
Dev Tools – Lua syntax checking plugin for Atom. LOVE2D autocomplete for Atom.
Systems – Lisp interpreter written in C. Version control system written in Go. Various parsers.
Web - Personal site with Django. Node.js hacks on Heroku. League of Legends stat tracker. Facebook-integrated WebGL board game that can be played async or real-time.
Graphics - Real-time non-Euclidean ray-tracer. Voxel terrain. 4D Multivariate function visualizer.
Android – Journaling app that syncs cross-device, shares via social networks.

Skills **Languages:** C/C++, Python, Go, JS+ES6, Java, C#, Lua, GLSL, Haskell, R, ActionScript
Libraries: Django, Angular, Google App Engine, Boost, OpenMP, Bootstrap, JQuery, OpenCV, Three.js, OpenGL, Love2D, Pixi.js, Ionic
Technologies: Mongo, Redis, Android, LaTeX, Postgres, Git/Hg, AWS, Azure, Linux (Ubuntu/CentOS), WebSockets, WebGL, HTML/CSS, TCP/UDP, Unity3D, Win APIs

Publication *Dyadic Interaction Assistant for Tracking Head Gestures and Facial Expressions*. IEEE Int'l Symposium on Haptic Audio Visual Environments and Game (2010)

Honors/Awards Accepted into Tau Beta Pi (2016), 1st at Facebook NorCal Hack 2013 - Advanced to Global, 3rd at Stanford ACM 2014 Winter Hack, TGen Top Symposium Speaker Award (2012), 3rd Place at ISEF (2012), 4th Place at ISEF (2011)