

Neeraj Aggarwal

aggarwal.neeraj141@gmail.com
650.906.9888

neerajaggarwal.com
linkedin.com/in/neeraj-aggarwal
github.com/n3a9

EDUCATION

- **University of Illinois at Urbana-Champaign** May 2021 (Expected)
B.S. Computer Science (College of Engineering); GPA: 3.93 - Dean's List *Champaign, IL*
 - **Research:** Currently exploring the reliability and resilience of deep neural networks by developing a run-time fault injection tool to model bit flips within neurons in the hidden layer using PyTorch
 - **Hack4Impact:** Working as a software developer for Hack4Impact. Last semester, I worked on the Cut to the Case mission to improve the safety of students by developing a map-based mobile application

EXPERIENCE

- **Nod Labs** Summer 2017
Software Engineer Intern *Mountain View, CA*
 - Worked on computer vision team to help develop SLAM algorithms integrated directly into product software
 - Designed and implemented bag of words model for image classification, added as a support library into SLAM algorithm to substantially increase live object-tracking performance
 - Optimized 3D reconstruction projections by increasing accuracy using bundle adjustment algorithms
- **Thinkster** Summer 2016
Software Engineer Intern *Menlo Park, CA*
 - Worked on development team to develop and maintain Thinkster's web platform serving over 10,000 monthly users
 - Designed, wrote, and published two courses: *Data Structures in Javascript* and *An Introduction to MEAN Stack*
 - Contributed to project RealWorld - a comprehensive demo application designed to teach a custom web stack
 - Led partnership with DigitalOcean to provide Thinkster Pro users credit to kick-start their project deployment

SKILLS & COURSEWORK

- **Coursework:** Software Design Studio, Discrete Structures, Probability & Statistics for Computer Science, Numerical Methods, Computer Architecture, Compilers and Interpreters, Expert Systems
- **Languages, Tools & Frameworks:** Java, C++, Python, Kotlin, HTML, CSS, JavaScript, Git, OpenCV, React, React Native, Flask, Node.js, Amazon Web Services

PROJECTS

- **Elore** eloreprojects.com
 - Co-founded elore, a community devoted to sharing knowledge on software development and computational problem-solving, as well as developing and maintaining open source projects
 - Main contributor to open-source project development on GitHub, including conceptualizing and leading development of *programjs*, a comprehensive node module for algorithms and data structures in ES6
 - Won awards *Top Company* and *Most Progressive Company* at MIT Launch
- **Vera** verafy.me
 - Award winner at LAHacks 2017, Vera is an open-source artificial intelligence system that uses machine learning and linguistic analysis to determine if a user-given statement is true or false
 - Uses Microsoft Azure Cognitive Services and Wolframs Cloud Development Platform to reference queried information by search engines, which is then analyzed in the truth-detection algorithm

AWARDS

- **2nd Place Overall, Harker Hacks 2018** June 2018
- **Best Use of Wolfram Technology, LAHacks 2017** February 2017
- **Gold Competitor, USA Computing Olympiad** January 2017
- **Top Company and Most Progressive Company, MIT Launch** August 2016