

Neeraj Aggarwal

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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*
 - **Courses:** Discrete Structures, Probability & Stats for CS, Data Structures, Computer Architecture, Numerical Methods, Ethics in Engineering, Applied Linear Algebra
 - **Research:** Exploring the reliability and resilience of deep neural networks with a run-time fault injection tool for neuron and weight corruption with RSim Research Group and Nvidia Research. Publication pending.
 - **Volunteering:** Volunteered to teach CS courses at local high schools with Hack4Impact and Women in CS. Also, I taught two courses at the SAIL Computer Science program.

EXPERIENCE

- **Facebook** Summer 2019
Software Engineer Intern *Seattle, WA*
 - Worked on the Ads Data Services team to develop and improve internal services with Javascript, PHP, and C++
 - Developed tool for debugging and interacting with a new backend service responsible for 95% of all ad traffic
 - Added new functionality and improved performance to existing tools, and all are now used by many internal teams
- **Nod Labs** Summer 2017
Software Engineer Intern *Mountain View, CA*
 - Worked on the computer vision team to develop SLAM algorithms in C++ integrated directly into product
 - 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 with over 10,000 views, and contributed to the project RealWorld - a comprehensive demo application designed to teach a custom web stack

PROJECTS

- **Hack4Impact** uiuc.hack4impact.org
 - Technical Lead responsible for team of eight developers to focus on project development, working directly with non-profit to improve workflows and efficiencies with technology
 - Last year, worked with nonprofit Cut To The Case to improve the safety of students by developing a map based mobile application for iOS and Android devices using React Native, Python, Flask, and MongoDB
- **PyTorchFI** github.com/pytorchfi
 - Developer of PyTorchFI, a run-time fault injection tool for PyTorch open-sourced and published on the PyPI package library. Winner of the Lynn Conway Research Award at the ADA research center
 - Spent one year planning, developing, and creating research presentations under guidance of Professor Sarita Adve
- **Elore** eloreprojects.com
 - Co-founder of community devoted to sharing software development and computational problem-solving
 - Top contributor to open-source development on GitHub, working on three independent projects

AWARDS

- **Lynn Conway Research Award, Center for Applications Driving Architectures** May 2019
- **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