

# Abdul Malek

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abdl.dev  
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## EDUCATION

### Saint Louis University

1 North Grand Boulevard, St. Louis, MO 63103

- Major: Computer Science
- Minor: Mathematics

### Hunter College

695 Park Ave, New York, NY 10065

### Stuyvesant High School

345 Chambers St, New York, NY 10282

## PROJECTS & WORK EXPERIENCE

### DevOps at Intersection // *Formerly, Control Group*

Worked with DevOps team to build an internal python-based web application that interfaced with several AWS services to provide user-friendly, human-interpretable Zendesk tickets for company clients. Currently in production status.

### Quadrocopter Development at Intersection // *Formerly, Control Group*

Worked with a small team with robotics experience to build and program an ArduPilot-controlled UAV incorporating GPS, magnetometer-based orientation, sonar-based speed control, and an accelerometer/gyroscope for feedback.

### Programming & Security Competitions // *ICPC, CSAW CTF, UFO CTF, & picoCTF*

Competed in the International Collegiate Programming Contest (ICPC). Competed in several capture-the-flag (CTF) style hacking/security competitions. Competitively solved challenges involving binary exploitation, forensics, reverse engineering, script exploitation, and cryptography. Ranked 38th internationally in UFO CTF and 42nd nationally in picoCTF. (Team Qubit)

### LWJGL Game Development

Developed 3D arcade game that interfaces with a server, with dynamic web content displaying animated score updates in real time, incorporating multiple graphics and web development tools/libraries.

### NetLogo Game Development

Developed multiple fully featured ports of popular mobile games, rewritten in NetLogo. Games include Defender, a feature-complete port of a dynamic-difficulty wave defense game, Line Runner, and a variation of B-Shooter.

### Stuy++

Started and led team with varying experience in development of new technology to modernize school. Developed networked monitoring system (wireless mesh) for unreliable escalators using Arduino and XBee.

### Software Engineering at FIRST Robotics

Led team in developing software for multi-system robot. Won first place at New York City Regional, won Chairman's Award at Connecticut Regional, and competed in the FIRST Championship. (FRC)

**Miscellaneous:** Putnam Mathematical Competition, TEDxStuyvesantHS (Organizer)

## TECHNICAL SKILLS

**Languages:** Python, C, C++, Java, JavaScript, Haskell, Go, x86, Lisp/Scheme

**Skills:** Linux, Git, Vim, AWS, SQL, Node.js, Flask, OpenGL, LWJGL, Arduino

**Experience:** distributed systems, operating systems, dynamic programming, natural language processing, security, cryptography, compilers, graphics, web, various math

## LINKS

**GitHub:** [github.com/abdl-dev](https://github.com/abdl-dev)

**LinkedIn:** [linkedin.com/in/abdl](https://linkedin.com/in/abdl)