Abdul Malek

abdl.dev
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New York, NY — (646) 552-1769

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. In production status.

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

LINKS

GitHub: github.com/abdl-dev
LinkedIn: linkedin.com/in/abdl