Abdul Malek

abdl.dev
me@abdl.dev

New York, NY — (646) 552-1769

EDUCATION

Saint Louis University
// 1 North Grand Boulevard, Saint 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

FIRST Robotics // President of Software Engineering
Developed multi-system robot software with team. Won first place at New York City Regional (2013), won Chairman's Award at Connecticut Regional (2011, 2012), competed in the FIRST World Championship (2011, 2012, 2013).

Stuy++ // Founder & President
Started and led team with varying experience in development of new technology to modernize school. Currently developing networked monitoring system (wireless mesh) for unreliable escalators using Arduino and XBee.

Stuy Coders // Vice President
Worked with small task force to develop applications for the Android platform.

CSAW CTF, UFO CTF, & picoCTF // Team Qubit
Competed in hacking/security competitions hosted by several different organizations. Competitively solved challenges involving binary exploitation, forensics, reverse engineering, script exploitation, and cryptography. Ranked 38th internationally in UFO CTF and peaked 42nd nationally in picoCTF.

Project Elite // Team Thirteen
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 // Independent
Developed multiple fully featured ports of popular mobile games, rewritten in NetLogo. Works include Defender, a complete port of a dynamic-difficulty wave defense game, Line Runner, and a variation of Bubble Shooter.

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

Nagatron // Control Group
Worked with a DevOps team to build a 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.

Miscellaneous: ARISTA (2009-2011), Big Sib Program (2012-2013), TEDxStuyvesantHS (2012-2013)

TECHNICAL SKILLS

Languages: C/C++, Objective-C, Java, Python, Ruby, Perl, PHP, JavaScript, Node.js, Scheme, Common Lisp, NetLogo, Arduino, Processing/Wiring

Skills: Linux, Apache (HTTPD, Tomcat), CGI Scripting, CAD, Inventor/SolidWorks, LaTeX, AJAX, jQuery, HTML/CSS, SQL, OpenGL, Slick2D, Jekyll, AWS (EC2, Elastic Beanstalk, RDS, S3, CloudFront, DynamoDB, CloudFormation, CloudWatch, IAM, SNS), Vim, Emacs, Git, Subversion, Bash, Zsh

INTERESTS

Control systems, physical computing, large-scale development, theoretical computer science, artificial intelligence (machine learning), computer security, game development (mechanics/theory)

Hobbies: Track, Hiking, Competitive Hacking, Competitive RTS Gaming

LINKS

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