

New York, NY — (646) 552-1769

# **EDUCATION**

#### **Saint Louis University**

1 North Grand Boulevard, St. Louis, MO 63103

Major: Computer ScienceMinor: 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:** robotics, distributed systems, operating systems, dynamic programming, natural language processing, security, cryptography, compilers, graphics, web, various math

#### LINKS

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