# Zachary Marcus

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#### **EDUCATION**

#### **NORTHEASTERN UNIVERSITY**

BS IN COMPUTER ENGINEERING AND COMPUTER SCIENCE

Expected May 2019 | Boston, MA
College of Engineering
Dean's List (Three Semesters)

GPA: 3.82 / 4.0

## **SKILLS**

#### **PROGRAMMING**

Android • Web

C++ • Java • C • OpenCL Python • Windows Batch • Bash

HTML • CSS • JavaScript

#### **COMMUNICATION**

Working Proficiency in Spanish • Public Speaking • Leadership

# COURSEWORK

Object Oriented Design
Fundamentals of Algorithms
Embedded Design: Enabling Robotics
GPU Computing
Logic and Computation
Fundamentals of Computer Science I & II
Circuits and Signals
Physics II: Electricity and Magnetism

# HONORS/AWARDS

National Merit Scholar Award MakeBU 2015 Hackathon Winner CleanWeb Hackathon Crowd Favorite Pavlok Shockathon 3rd place contestant

## LINKS

Github:// ZachMarcus LinkedIn:// zacharyjmarcus

#### **EXPERIENCE**

# ADVANCED MICRO DEVICES (AMD) | SOFTWARE COOP ENGINEER

January 2016 - Present | Boston, MA

- Scripting in Python and Windows Batch to test modifications to the shader compiler
- Analyzing bugs in compiler caused by shaders and determining sources of bugs

# NORTHEASTERN UNIVERSITY COMPUTER ARCHITECTURE RESEARCH LAB | Undergraduate Research Assistant

May 2015 - Present | Boston, MA

- Expanding Android application for simplified GPU benchmarking, porting a benchmark suite designed for heterogeneous computing infrastructures
- Developing Android application and executables for side channel analysis of mobile device GPUs

#### **SUPERCOMPUTING 2015** | Undergraduate Student Competitor

August 2015 - November 2015 | Boston, MA; Austin ,TX

- Part of a team competing in the International Conference for High Performance Computing
- Learning the particular hardware and optimizing configurations for specific applications

#### **ENERDYNE POWER SYSTEMS** | ENGINEERING INTERN

May 2013 - Aug 2013; May 2014 - Aug 2014 | Charlotte, NC

- Modified database of methane gas well readings spanning two decades
- Trained 12 landfill managers in Excel functionality to assist in monthly reports
- Created diagrams and other visuals for use in project proposals and documentation
- Executed pipeline plans in active landfills

## **VOLUNTEER EXPERIENCE**

# **GENERATION CITIZEN** | DEMOCRACY COACH / COHORT LEADER Sep 2014 - Present | Boston, MA

- Advise on how to best deliver an action civics education to students
- Communicate with community partners and local figures to determine solutions to community problems
- Guided classes in projects tackling issues to facilitate learning

# **ACTIVITIES & SOCIETIES**

Major-related: NUMakes, Citizen Teaching, NU Hacks,

IEEE, Wireless Club (Ham Radio)

**Northeastern-Related:** Generation Citizen, Civic Engagement Program,

Northeastern University Honors Program