

Carter E. McCardwell

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EDUCATION

Northeastern University

Boston, MA

Major: Bachelor of Science, Computer Engineering **Minor:** Economics, Computer Science *December 2018*

GPA: 3.8 / In Major GPA: 4.0

Key Courses: Embedded Design / Logic, Differential Equations and Linear Algebra, Electronics & Algorithms.

Published Research:

- Exploring the Features of OpenCL 2.0 - Published at IWOCL, 2015 (Stanford University).
- FIR Filtering and AES Encryption with OpenCL 2.0 - Published at BARC, 2015 (Boston University).
- CLIP: An IP-based GPGPU compute clustering framework - Published at BARC, 2016 (Northeastern).

Other Research and Academic Activity:

- Optimization of OpenCL & CUDA code.
- Utilization of encryption algorithms in various applications used in graduate research.
- Creation of major components of Hetero-Mark, an application funded by the HSA Foundation.
- Co-editor of the GPGPU-10 workshop, part of ACM's PPOPP Conference (University of Texas, 2015).

Honors and Activities:

- Vice President, IEEE Northeastern Chapter, 2016-2017.
- Captain, Northeastern High Performance Computing Team, 2015, 2016, 2017. Award winner and participant in high performance computing competitions against university teams from across the globe.
- Merit Scholarship award recipient, 2015, 2016, 2017.
- Goldwater Scholarship Nominee, 2016

PROFESSIONAL EXPERIENCE

Amazon Robotics

Boston, MA

Systems Engineer

Jan.2017 – June 2017

- Invented and synthesized a novel system to improve warehouse productivity across Amazon's distribution network.
- Scaled software to operate on Amazon's production fulfillment network using AWS infrastructure.
- Analyzed fulfillment technology spending to identify inefficiencies and to drive cost savings.

United States Department of Defense

Washington DC

Electrical / Computer Engineer

Jan. 2016 – Aug.2016

- Led network, protocol, and cellular analysis to reverse-engineer a proprietary product.
- Collaborated across organizations and countries to develop a proprietary, common use product.
- Created a software stack to automate an industrial-grade embedded printed asset production system.
- Implemented an ASN.1 multi-use encoder from official specifications for custom use.

MITRE Corporation

Bedford, MA

Computer Engineer

May 2015 – Sept. 2015, July 2017 – Aug. 2017

- Transformed a bi-static radar processing application into a dynamic real-time dataflow framework that improved usability and customization for non-engineers.
- Improved firmware of a test GPS satellite transmitter to allow for on-the-fly modification of test parameters.

ADDITIONAL

Other Experience: Lived and completed high school in Sydney, Australia. Traveled extensively in Asia.

Interests: Travel, rowing, general fitness & water skiing.