Mark Edmonds

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EDUCATION

UNIVERSITY OF CALIFORNIA. LOS ANGELES

MS IN COMPUTER SCIENCE **Expected Spring 2017** Cum. GPA: N/A

UNIVERSITY OF DAYTON

BS IN COMPUTER ENGINEERING

Grad. May 2015 Cum. GPA: 3.87 Major GPA: 3.93 Magna Cum Laude

Dean's List (7/8 Semesters)

Leadership in Flyer Innovations

2014 Chief of Innovation Chief of Operations 2013

SHAWNEE MISSION EAST H.S.

Grad. May 2011

LINKS

Github://mjedmonds LinkedIn://mjedmonds

COURSEWORK

GRADUATE

Pattern Recognition and Machine Learning

Teaching Assistant

Introduction to Computer Science

UNDERGRADUATE

Artificial Intelligence Operating Systems Automata Theory

UNIX/Linux Programming

Teaching Assistant

Electronic Devices Lab **Engineering Innovations**

SKILLS

PROGRAMMING

Over 5000 lines:

C++11 • C • Python • Shell • LATEX

Over 1000 lines:

Java • Matlab • CUDA

Familiar: Assembly

RESEARCH

CENTER FOR VISION, COGNITION, LEARNING, AND AUTONOMY

GRADUATE RESEARCHER

Los Angeles, CA | Sept 2015 - Present

Recently joined the lab and currently exploring research projects.

DECLARATIVE MEMORY

HEAD UNDERGRADATE RESEARCHER Dayton, OH | May 2014 - Sept 2015 Worked with Dr. Scott Douglass and Prof Tarek Taha to accelerate the declarative memory module of the CECEP cognitive architecture (based on ACT-R). The research focused on leveraging the parallel computing abilities of the CUDA programming platform. One publication published, another publication in writing.

ROBOTIC ARM BRAIN MACHINE INTERFACE

Undergradate Researcher

Dayton, OH | Aug 2014 - May 2015

Worked in a team of peers to expand the capability of a brain machine interface through EEG signals and a robotic arm. The team implemented additional gestures and improved the universality of the interface. Publication published.

EXPERIENCE

AIR FORCE RESEARCH LAB

Undergraduate Researcher Dayton, OH | May 2014 - Sept 2015

- Conducted Declarative Memory research in a cutting-edge research environment.
- Used CUDA to parallelize declarative retrievals, yielding a 100x speedup over the fastest existing implementation.
- Implemented thread pools, parsers, IPC.

GARMIN

SOFTWARE ENGINEERING INTERN

Olathe, KS | May 2013 - Aug 2013

- Interned as a member of the Datalink team in the Aviation Department.
- Contributed to the ACARS protocol for Garmin Avionics software.
- Reduced verification testing time by 40%.

CRISTO REY KANSAS CITY HIGH SCHOOL

TUTOR AND TEACHER

Kansas City, MO | May 2011 - Aug 2012

• Pre-calculus and chemistry tutor and teacher at an inner city high school.

PUBLICATIONS

2015 In Writing Hardware Accelerated Declarative Memory Systems

through CUDA

SNPD 2015 High Performance Declarative Memory Systems through 2015

2015 NAECON 2015 Brain machine interface using Emotiv EPOC for controlling

a robotic arm

SOCIETIES AND AWARDS

2015 University The Anthony Horvath and Elmer Steger Award of Excellence

National Eta Kappa Nu IEEE Honor Society 2014 Tau Beta Pi Engineering Honor Society 2014 National

2011 **Boy Scouts** Eagle Scout with over 200 hours of community service