Mark Edmonds

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EDUCATION

UNIVERSITY OF CALIFORNIA, LOS ANGELES

MS in Computer Science
Expected Spring 2017
Cum. GPA: 3.3

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

Chief of Innovation   2014
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

Working to give a Baxter robot visual and wheel odometry using a Intel RealSense camera and a Dataspeed Baxter Mobility Base.

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.
- 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
2015	SNPD 2015	High Performance Declarative Memory Systems through MapReduce
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
2014	National	Eta Kappa Nu IEEE Honor Society
2014	National	Tau Beta Pi Engineering Honor Society
2011	Boy Scouts	Eagle Scout with over 200 hours of community service