Mark Edmonds

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mark@mjedmonds.com | 913.284.1418

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
Learning and Reasoning with Bayesian Networks
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

2016	In Writing	Hardware Accelerated Declarative Memory Systems through CUDA
2015	SNPD	High Performance Declarative Memory Systems through MapReduce
2015	NAECON	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