

# Michael Koval

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## EDUCATION

### Rutgers University, School of Engineering

*Electrical & Computer Engineering, B.S.; Computer Science, B.S.*

Piscataway, NJ

May 2012

- Junior with 108 credits and a 4.0 GPA with an expected graduation date of May 2012
- Graduated Lenape High School with a 4.0 GPA and a class rank of 5 in 450
- Member of the School of Engineering's Honors Program and the Slades Scholar program
- Involved in research on the application of reinforcement learning to robotics under Professor Littman

## SKILLS

**Programming Languages:** C (4 yrs), C++ (4 yrs), Java (3 yrs), Python, x86, MIPS, Scheme, Prolog

**Related Skills:** Git, SVN, Matlab, OpenCV, LaTeX, Gnuplot, Microsoft Office

**Operating System:** Windows XP/Vista/7, Linux (Ubuntu), and Mac OS X (10.6)

## EXPERIENCE

### Microsoft Corporation

Redmond, WA

*Software Development Engineer (SDE) Internship*

May-August 2011

- Interning with the group responsible for developing Bing, Microsoft's search engine

### US Government

*Computer Science Internship Program*

May-August 2010

- Collaborated with an internal customer and contractors with extensive domain-specific expertise
- Applied computer vision algorithms to grayscale images with multi-modal intensity histograms
- Developed novel segmentation algorithms using clustering and probability theory
- Designed and implemented domain-specific feature extractors for object identification

### University of Central Florida

Orlando, FL

*AMALTHEA REU advised by Professor Michael Georgopoulos*

May-August 2009

- Researched a graph-based target recognition algorithm for swarm robotics
- Coded C++ simulation modules for Stage, an open source two-dimensional simulator for swarm systems
- Co-author of a paper submitted for review to the 2010 IEEE ICRA conference

### Rutgers University

Piscataway, NJ

*Department of Computer Science Peer Leader*

Fall 2008-Present

- Teach two 55-minute Introduction to Computer Science recitations per week
- Responsible for maintaining attendance logs for grading and reviewing material covered in lecture

### IEEE, Rutgers University Student Chapter

Piscataway, NJ

*Internal Vice President*

Spring 2009-Present

- Co-author of an open-source hardware abstraction layer for VEX-branded PIC and ARM microcontrollers
- Organized a close relationship with the corporate leadership of VEX Robotics centered around this project

## SECURITY CLEARANCE

- Information available upon request

## AWARDS

- Rutgers University Presidential Scholarship
- Edward J. Boustein Distinguished Scholar
- Steven Petrucelli Scholarship
- Hannah Sands Endowed Scholarship
- Noe, James, and Edna Endowed Scholarship