

MAX KNUTSEN

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EDUCATION

University of Maryland Baltimore County, Baltimore, Maryland
Bachelor of Science in Computer Science, GPA: 3.2

Expected Graduation: May 2016

McLean High School, McLean, Virginia

Advanced Diploma, GPA: 3.6

Graduated: June 2013

RELEVANT COURSEWORK

Discrete Mathematics
C/Assembly

Data Structures
Statistics for Engineers

Programming Languages
Linear Algebra

PROJECTS

VEX Toss-Up

September 2013 – March 2014

As a part of retriever robotics, I worked on the design and programming of a small robot that could toss a small ball, move the small and large scoring objects around the game board, and hang itself from a 40" bar for use in a competition.

Boggle

September 2013

Contrasted the performance of a trie and hash table to quickly search through the dictionary. Used Java to create a responsive and intuitive Graphical User Interface for the classic board game.

Connect Four

January – May 2013

Utilized a Minimax tree to traverse five layers of potential moves and minimize the potential worst case scenario. Created an artistic GUI in Java with animations and sound effects, as well as several menus.

WORK EXPERIENCE

Cougaar Software, Inc. – Junior Software Engineer Intern – Vienna, Virginia

June – December 2014

Designed a modular, goal-oriented robotics framework. Then used Cougaar Software's Active Edge communication network to implement two sample robotics systems. The robotics systems were comprised of multiple Raspberry Pis, which communicated over a distributed computer network. Also designed and implemented a serial communication grammar for Raspberry Pis to task an Arduino Uno.

TIC Summer Camp – Robotics Counselor – McLean, Virginia

Summer 2012 & 2013

Instructed children between the ages of 6 and 16 on design concepts as well as programming in Lego Mindstorms and RobotC.

EXTRACURRICULAR ACTIVITIES

Retriever Robotics

Treasurer; Lead Programmer

Council of Computer Majors

Member

Information Systems Council of Majors

Member

Institute of Electrical and Electronics Engineers

Member