

ALEX DAY

Grove City, PA · alexday135@gmail.com · (724) 841-2634 · <https://www.alexday.me>

EDUCATION

Clarion University of Pennsylvania

Clarion, PA

B.S. in Computer Science, Minor in Chemistry (Cum Laude)

September 2016 - December 2019

GPA: 3.4/4.0 (3.8/4.0 in major)

EXPERIENCE

University of Arizona

Tucson, Arizona

CAT Vehicle Research Assistant (REU)

May 2019 - August 2019

- Worked within a team to develop a simple way to create autonomous vehicle paths with WebGME for use in a 4th grade curriculum
- Developed a verification server in Flask that performed reachability analysis on a given path
- Prepared and presented research at the UROC conference at the University of Arizona
- Extensively tested the project in both simulation and on the Cognitive and Autonomous Test (CAT) Vehicle

Komatsu Mining Ltd.

Franklin, PA

Student Engineer

May 2018 - August 2018 and December 2018 - January 2019

- Implemented a logging management tool in C# to be used on all Komatsu Mining equipment
- Created data analysis tools in Excel VBA and Python to assist with debugging of all mining machines
- Augmented the Longwall Shearer testbed with a powercycle scheduler built on the Raspberry Pi platform

Clarion University Library

Clarion, PA

Lab Manager

February 2018 - December 2019

- Created multiple scripts in Python to improve automatic logging of library items
- Supervise a group of 10 student workers providing IT assistance to library patrons

Clarion University

Clarion, PA

Tutor

February 2018 - May 2019

- Retaught students complex topics from all levels of courses
- Assisted with office hours for Intro to Programming II (C#) & Object Oriented (Java) classes

SKILLS

Programming Languages: Python, C#, C/C++, Java, HTML/JavaScript/CSS

Technologies: Linux, Git, L^AT_EX, Robot Operating System (ROS), Flask, Gazebo, SQL

PROJECTS

English to Emoji Translation Python, NLP

- Devised novel algorithm for translating sentences into emoji counterparts for information compression
- Implemented sentence splitting algorithm based on part-of-speech and dependency relations
- Presented this project at the Penn York conference in 2019

LEADERSHIP AND INVOLVEMENT

Association of Information Technology Professionals

Clarion, PA

August 2016 - December 2019

President

August 2018 - May 2019

- Ran weekly meetings to update members on activities of the group
- Hosted multiple hour long seminars on topics including version control and robotics

Vice President

August 2017 - May 2018

- Assisted in running weekly meetings to update members on activities of the group
- Hosted multiple hour long seminars on topics including version control and unit testing

AWARDS

Clarion University CIS Student of the Month

December 2019

Dean's List

Fall 2018, Spring 2019

Elizabeth Ross AITP Scholarship

2018, 2019

George Lewis Scholarship

2018, 2019

Joy Scholarship

2016