

# ALEX DAY

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

## EDUCATION

<b>Clemson University</b> Ph.D. in Computer Science	Clemson, SC September 2020
<b>Clarion University of Pennsylvania</b> B.S. in Computer Science, Minor in Chemistry ( <i>cum laude</i> )	Clarion, PA September 2016 - December 2019

## EXPERIENCE

<b>Clemson University</b> <i>Lead Graduate Teaching Assistant</i> <ul style="list-style-type: none"><li>Assist faculty members with instruction using remote learning technologies</li><li>Lead two lab sections of 30 students to reinforce new software development techniques</li></ul>	Clemson, SC September 2020
<b>University of Arizona</b> <i>CAT Vehicle Research Assistant (REU)</i> <ul style="list-style-type: none"><li>Worked within a team of 3 to develop a simple way to create autonomous vehicle paths with WebGME for use in a 4th grade curriculum</li><li>Developed a verification server in Flask that performed reachability analysis on a given path</li><li>Prepared and presented research at the UROC conference at the University of Arizona</li><li>Extensively tested the project in both simulation and on the Cognitive and Autonomous Test (CAT) Vehicle</li></ul>	Tucson, AZ May 2019 - August 2019
<b>Komatsu Mining Ltd.</b> <i>Student Engineer</i> <ul style="list-style-type: none"><li>Implemented a logging management tool in C# to be used on all Komatsu Mining equipment</li><li>Created data analysis tools in Excel VBA and Python to assist with debugging of all mining machines</li><li>Augmented the Longwall Shearer testbed with a powercycle scheduler built on the Raspberry Pi platform</li></ul>	Franklin, PA May 2018 - August 2018 and December 2018 - January 2019
<b>Clarion University Library</b> <i>Lab Manager</i> <ul style="list-style-type: none"><li>Created multiple scripts in Python to improve automatic logging of library items</li><li>Supervise a group of 10 student workers providing IT assistance to library patrons</li></ul>	Clarion, PA February 2018 - December 2019

## SKILLS

Programming Languages:	Python, Java, C#, C/C++, HTML/JavaScript/CSS
Technologies:	Linux, Git, L <sup>A</sup> T <sub>E</sub> X, Tableau, Robot Operating System/Gazebo, SQL

## PROJECTS

<b>English to Emoji Translation</b> <i>Python, NLP</i> <ul style="list-style-type: none"><li>Devised novel algorithm for translating sentences into emoji counterparts for information compression</li><li>Created a new sentence splitting algorithm based on part-of-speech and dependency relations</li><li>Accepted for publication in PACISE Journal in 2019 (delayed by COVID)</li></ul>
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## LEADERSHIP AND INVOLVEMENT

<b>Association of Information Technology Professionals</b> August 2016 - December 2019	Clarion, PA
<i>President</i> <ul style="list-style-type: none"><li>Ran weekly meetings to update members on activities of the group</li><li>Hosted multiple hour long seminars on topics including version control and robotics</li></ul>	August 2018 - May 2019
<i>Vice President</i> <ul style="list-style-type: none"><li>Assisted in running weekly meetings to update members on activities of the group</li><li>Hosted multiple hour long seminars on topics including version control and unit testing</li></ul>	August 2017 - May 2018

## AWARDS

<b>Clarion University CS Dept. Student of the Month</b>	December 2019
<b>Clarion University Dean's List</b>	Fall 2018, Spring 2019
<b>Elizabeth Ross AITP Scholarship</b>	2018, 2019
<b>George Lewis Scholarship</b>	2018, 2019
<b>Joy Scholarship</b>	2016