Alexander Havrilla

412-607-9310

alumhavr@andrew.cmu.edu | www.linkedin.com/in/alexander-lum-havrilla/

Education

- Bachelor of Science in Discrete Math and Logic Carnegie Mellon University, May 2021 GPA: 3.83/4.0
- Additional Major in Computer Science
- Relevant Coursework: Computer Systems, Harmonic Analysis, Principles of Functional Programming,
 Computational Biology, Vector Analysis, Matrix Theory, Differential Equations, Abstract Algebra

Experience

PGH Pawngrabbers Internship

August 2018 - Present

Designed and Implemented custom website structured on Django.

Certified Pool Operator. Blackridge Civic Association, Duties:

May 2018 - September 2018

- Improved pool clarity and maintained proper chemical balance and safety.
- Mathematical research at Pittsburgh Regional Science and Engineering Fair 2015 2018
 - Wrote two Research Papers on topological knots and knot invariants
 - Received Duguesne Department of Mathematics
- Blog on rationality and happiness:
 - http://alexanderhavrilla.com/thinking-towards-happiness/
- Participated in TartanHacks Hackathon 2018:

February 2018

- o Built online interactive CMU Course Catalog: CMUCourseNetwork.pythonanywhere.com.
- Natural Language parser for propositional logic system
- Mentor: 2015 2017
 - Helped instruct fellow students in their studies; usually in math. Handpicked to lead a Calculus math lab that served as supplemental instruction to the class.

Technical Skills

 HTML5, CSS, SQL, Javascript, Java, C#, C/GDB Debugger/x86 Assembly, Python, SML, Machine Learning, Unix/Linux, C++, Git

Leadership

Captain of WHHS Science Olympiad States Team:

October 2015 - May 2017

• Organized system of research notes distribution and building designs using Google Docs

President of National Honors Society chapter at WHHS

October 2016 - May 2017

Produced volunteer promotional video for WHHS

Extracurricular Activities

- CMU Math Club Member
- PJAS Science Fair Mentor
- Badminton Club Team Member
- Putnam Competitor