JACK SHUNN

EDUCATION

Bachelor of Science, Computer Science

University of Utah: **GPA 3.991** Aug 2021 – Dec 2024

Coursework:

Artificial Intelligence, Deep Learning, Al-Alignment, Computer Vision, Computer Graphics, Operating Systems,
 Scientific Computing, Software Practice 1 & 2, Databases, Foundations of Data Analysis, Computer Organization & Systems, Data Structures, Algorithms, Calc 3, Linear Algebra, Discrete Structures

Undergraduate Research:

- <u>Spring 2022</u> Working with Prof. Jeff Phillips to research bias found in computer-generated word embeddings. My introduction to Python and Data Science. Minor contributions to https://openreview.net/forum?id=TkQ1sxd9P4
- <u>Spring 2023</u> Working with Prof. Jeff Phillips to research modifications to state-of-the-art information retrieval model, SPLADE. My introduction to neural networks and high-performance computing.

WORK EXPERIENCE

Lucid Software: Software Engineering Intern

May 2023 – Aug 2023

- Spearheaded a project to remove a bottleneck slowing down message passing between a server and clients.
- Increased the maximum number of live collaborators on a document by 300%

University of Utah School of Computing: Research Associate

Jan 2023 - May 2023

- Assisted a graduate student with information retrieval research—specifically document retrieval and ranking.
- Leveraged Python libraries, TensorFlow, NumPy, Matplotlib, for machine learning and data analysis.

T. D. Williamson: Software Engineer Intern

June 2022 – Jan 2023

- Developed new features, bug fixes, and unit tests for internal and customer-facing applications.
- Gathered experience with Vue, MongoDB, WPF, Qt C++ apps, Firebird SQL DB, and Subversion version control.

School of Computing, University of Utah: Teachers Assistant

Jan 2022 – May 2022

- Presented three 50 min lectures to a classroom of 25 students weekly, graded assignments, and tutored one-on-one for a Computer Science class.
- Improved my ability to communicate computer science topics with my peers.

Digital Gravy Animation: Rigging Intern

May 2021 – Sep 2021

- Learned to create professional character rigs for animation in the Toon Boom Harmony software.
- Taught myself how to use Harmony's API to create custom scripts and functionality in the animation software.

Bonneville Communications: Work-study Intern

Feb 2019 - May 2019

- Awarded a competitive internship through the Utah CTE Information Technology Pathway Program.
- Shadowed the app development team to produce a social network, video sharing app.

VOLUNTEER WORK

Vice President: Technical Coding Club – University of Utah

Aug 2023 – Current

World Map Project: Salt Lake City's Alcoholics Anonymous Central Office

Fall and Winter of 2021

- Designed and implemented a system to use a tablet to control 100 LED lights embedded in a world map.
- Contributed 100 hours while working with another University of Utah student.
- Learned to design circuits and program single board computers.
- Programmed a driver in Rust to interface with a custom circuit board.

Religious Mission: Baltimore MD Jun 2019 – Aug 2020

ACHIEVEMENTS & SKILLS

Languages I Like: C / C# / Rust / Scala / Python / TypeScript

Tools: Git, SVN, Bazel, Linux

Boy Scouts of America: Eagle Scout Rank

VEX Robotics: 2016 State Championship winner and 7th place at World Championship