

Micah Weitzman

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micahweitzman.com

EDUCATION

University of Pennsylvania, School of Engineering and Applied Sciences

Philadelphia, PA

Bachelor of Science in Engineering (B.S.E) - Summa Cum Laude

May 2022

Major: Computer Engineering

Minor: Mathematics, Computer Science

Cumulative GPA: 3.87/4.00

Awards: Dean's List 2018-2019 & 2021-2022, Dept. of Germanic Languages and Literatures Yiddish Arbiter Ring Prize

Relevant Coursework: Distributed Systems, Compilers, Operating System, Databases, Networked Systems, Circuit-Level Modeling, Embedded Devices, Data Structures & Algorithms, Discrete Math, Calculus I/II/III/IV, Algebra

Extracurricular Activities: IEEE Eta Kappa Nu Engineering Honors Society Lambda Chapter, Penn Tutoring Center, Penn Climbing Club, Tau Epsilon Phi Fraternity Rho Chapter, Computer Science Teaching Assistant

PROFESSIONAL EXPERIENCE

Qualcomm – GCAD

Santa Clara, CA

Software Engineer

September 2022 – Current

- Developed robust software tools for next generation Snapdragon EDA flows.
- Designed and executed regression suite to monitor KPI and recreated EDA flows across entire CAD team.

Software Engineering Intern

June-August 2021

- Developed data driven approach for advanced Clock Tree Synthesis and clock hierarchy design with ML algorithms.
- Designed and wrote internal tool in Python to automate digital design workflow.
- Generated graphical representation for key metrics of SoC clock tree timing.

University of Pennsylvania – Center for Neural Engineering and Therapeutics

Philadelphia, PA

Research Intern – Litt Lab

June-August 2020

- Investigated state of the art Natural Language Processing Machine Learning models and implemented initial experiments.
- Improved Data Augmentation techniques on SQuAD style dataset to be implemented on epilepsy patient datasets.

University of Pennsylvania – Penn Undergraduate Research Mentorship

Philadelphia, PA

Research Intern – Pikul Research Group

May-August 2019

- Investigated the effect of electrolyte makeup on the mechanical properties of electrodeposited thin nickel films.
- Used trends in literature to investigate new additives to improve mechanical toughness of films.
- Developed automated software tools to synthesize data and produce meaningful graphs of tensile strength results.

Midwest Campers Inc.

Sugar Grove, PA

Deputy Director of Experiential Education

June-August 2018

- Coordinated a group of 20 staff members daily through running 12 different educational stations.
- Managed scheduling and communication between staff members and upper-level management.
- Ensured the logistics and management of 400+ glassblowing, blacksmithing, and woodshop projects.

PUBLICATIONS

Extracting Seizure Frequency From Epilepsy Clinic Notes: a Machine Reading Approach to Natural Language Processing, Kevin Xie et. al, Journal of the American Medical Informatics Association, 2022, <https://doi.org/10.1093/jamia/ocac018>

TECHNICAL SKILLS

Software: Python, C/C++, Rust, React, Typescript, OCaml, ReactNative, SQL, MongoDB, Haskell, Java, Assembly, LLVM, Git, Linux/Bash, Test-Driven Development, Functional Programming, Object Oriented Design

Projects:

- Developed application to covert Slow Scan Television (SSTV) audio to PNG image files. (Rust)
- Developed compiler for Oat programming language to x86 assembly with LLVM. (x86 assembly, LLVM, OCaml)
- Created a HTTP web server with email (SMTP/POP3), web storage and distributed backend from scratch. (C/C++)
- Developed and deployed mobile and web-based application to connect grocery stores with surplus food to customers. (Typescript, React, ReactNative, Express, MongoDB)
- Developed a Full Stack JavaScript app for displaying aggregate statistics for major league sports (React, Express, MongoDB)

Certification: FCC Amateur Radio License General Class – Callsign KC3SQY

LEADERSHIP EXPERIENCE

University of Pennsylvania

Philadelphia, PA

Undergraduate Teacher's Assistant – CIS240 Intro to Computer Architecture

August-December 2021

- Held weekly office hours for students and answered questions relating to coursework.

Undergraduate Teacher's Assistant – MCIT595 Computer Systems Programming

January-May 2022

- Helped develop courses material for graduate level course. Held weekly office hours for students and recitation session.

Penn Tutoring Center - Tutor

October 2019-May 2020

- Led multiple hour-long tutoring sessions for Calculus I/II, Electricity & Magnetism, and Computer Science.

PERSONAL PROFILE

Languages: Hebrew (fluent), Yiddish **Interests:** Programming, Rock Climbing, Billiards, Bouldering, Hiking, Guitar, Math