

Alexander R. Melnick

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EDUCATION

Boston University, College of Engineering
Master of Science, Electrical and Computer Engineering
GPA 3.8; Dean's List Recipient; Program Ambassador

Boston, MA
Expected 2025

Washington University in St. Louis, College of Arts and Sciences
Bachelor of Arts, Psychological & Brain Sciences
GPA 3.5; Dean's List Recipient

St. Louis, MO
2018 – 2022

EXPERIENCE

Scytale AI, Tel Aviv, Israel
Integrations Intern, Research and Development

June 2024 – July 2024

- Led a project porting legacy integration code from TypeScript to Python, extensively researching and implementing APIs for Okta, MongoDB, Snowflake, and BambooHR. Utilized GitHub, AWS, Kubernetes/K8s, and Okteto for debugging and deployment, ensuring successful production integration.
- Configured Ubuntu environments, fixed in-production code integrations, and corrected documentation. Coordinated daily meetings to enhance team collaboration and synchronization.

Eisner Advisory Group LLC, New York, NY
Tax Accountant Staff I, Private Wealth Advisory Group

July 2022 – January 2023

- Expertly prepared tax returns for high-net-worth clients, including personal, corporate, and trust filings.
- Participated in extensive training over the course of multiple weeks on accounting and taxation practices.
- Reviewed years of clients' historical financial records to perform cash analyses and bank reconciliations.

National Runaway Safeline, Chicago, IL
Crisis Intervention Intern

May 2021 – August 2021

- Responded to real-time inbound phone calls and internet chats from individuals in crisis to determine how to best support them to prevent further detriment.
- Assessed crisis situations in real-time by obtaining and analyzing facts. Collaborated with the youth, brainstormed possible solutions, and decided on a defined course of action.
- Trained using a five-step crisis intervention model to enable self-sufficiency with contacts, including mock crisis calls, followed listen-ins, and supervised live calls.
- Completed in-depth logs and synopses of crisis communications.
- Consulted with both task supervisors and clinical supervisors for support and processing of contacts.

PROJECTS

Jovial HP-16C Assembler – Independent

- Developed a custom assembly language and assembler for the 1982 HP-16C Computer Scientist calculator in Python, supporting all operations, multiple simulators, and conforming to the 203 Byte system memory limitation.
- Enabled output in multiple formats, created comprehensive documentation, and contributed to the open-source community by extending existing software and providing a library of assembly programs.

Machine Learning for Image Classification – Course Project

- Developed a binary classification model to distinguish between dog and cat images using MATLAB.
- Employed machine learning techniques, including Principal Component Analysis (PCA) and discriminant analysis (LDA and QDA), to reduce overfitting in high-dimensional data.
- Analyzed model performance, understanding trade-offs between complexity and accuracy.
- Showcased proficiency in data preprocessing, feature extraction, and AI performance evaluation.

FPGA-Based Stopwatch and Alarm – Course Project

- Developed digital stopwatch alarm on Nexys A7 board with XILINX Artix-7 FPGA using Verilog and Vivado.
- Included advanced timing functions for both ascending and descending time tracking capabilities.
- Implemented scoreboard system which stores the three longest and shortest times in memory for later recall.
- Incorporated multiple 7-segment displays, switches, debounced buttons, and audio for a comprehensive UI.