Nir Miller

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EDUCATION

The University of Texas at Austin, Austin, TX May 2026

Bachelor of Science, Computational Physics

- GPA : *3.74/4.0*
- Certificate: Elements of Computing
- Relevant Coursework: Data Structures (Python), Differential Equations with Linear Algebra, and Electromagnetism

SKILLS

Technical /Computer Skills: Advanced Python (4 years), Intermediate Java (4 years), Basic HTML5 (½ year), Basic C# (½ year), Jupyter Notebook, Google Collab, GitHub

Languages: Native Hebrew, Native English

EXPERIENCE

UT Sanger Learning Center, Austin, TX November 2022 - Present

Sciences Tutor

- Communicate with incoming college students regarding their homework problems and cooperate with them to develop practical learning solutions to their issues.
- Skills used: Python, Advanced Calculus, Physics Mechanics

Daron Roberts LLC, Austin, TX November 2022 - April 2023

Private Python Developer

- Facilitated increased engagement and profile growth on LinkedIn through a custom LinkedIn scraper that utilizes sentiment and semantic analysis language processing models to pinpoint most engaged users.
- Skills used: Python, TensorFlow, Natural Language Processing, API's, Semantic Analysis

Google Startups: Homaze, Tel Aviv, ISR September 2021- January 2022

Website Developer / Intern

- Enabled the accumulation of $65,000+ in funding through the development of a company website.
- Spearheaded important team meetings regarding company goals, outlook, website design, and payment systems.
- Skills used: Graphic Designing, Team Communication, Marketing

PROJECTS

Idea-search.com, Austin, TX May 2023 - Present

Full Stack Developer

- Programmed a website from scratch for individual creators to accurately search whether their new ideas have been created or patented before. It integrates APIs like Google Cloud, Patent Search, and YouTube search as a database for past creations. To enhance search, the program takes advantage of natural language processing and semantic analysis techniques to better understand and query a user's idea.

Chaos Control Theory Notebook, Austin, TX May 2023 - August 2023

Python Developer / Researcher

- Investigated Edward Otts paper on Controlling Chaos (2006) utilizing an Echo State Network to predict the next time step in a Lorenz System approximated with the Fourth Order Runge Kutta method. The predicted future trajectory of the chaotic times series was then used to create a controlling force that coerced the chaotic system into any desired state. This research has applications in a number of fields including robotics, medical systems, plasma control, and weather forecasting models.

Machine Learning Market Sentiment Analyzer, Austin, TX November 2022 - Present

Python Developer

- Programmed a python-based application utilizing transformer neural networks, web scraping, and the Natural Language Toolkit (NLTK) to conduct sentiment analysis on relevant market news and its correlation with market trends.

ACADEMIC PUBLICATIONS

The University of Texas at Austin, NSC 315 Inventors Energy Analytics January 2023- May 2023

Supervisor Dr.Michael Pyrcz and ConocoPhillips

Lead Python Developer/ Project Leader

- Robinson, E., Miller, N., Bean, J., & Dam, L. - Classification of Rod Pump Failures
  Investigated the association between differential pressure and oil volume exerted upon a sucker rod pump and failure outcomes. Utilized data analysis and three machine learning models to examine Rod Pump data provided by ConocoPhillips. Wrote a manuscript about the research findings and presented the information to ConocoPhillips.