Gilad A. Schneider

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Education

Rutgers University – Double Bachelor's in Computer Science, Mathematics **May, 2023**

- Summa Cum Laude, 3.97 GPA, Dean's List every semester, Student Excellence Award
- **Relevant Coursework:** Data Structures, Algorithms, Machine Learning, Multivariable Calculus, Linear Algebra, Numerical Analysis, Statistics, Graph Theory, Optimization, Real Analysis

Skills: Python (SciPy, Pandas, PyTorch, Flask, PyGame), React, Typescript, Java, C, R, SQL, HTML, CSS, Linux, Git, LaTex, Neural Networks, Numerical Methods, Nonlinear Programming

Work Experience

MassLight – Software Engineer **July, 2023 – Present**

- Working on a headless EHR called zapEHR.

GreenTree – Full Stack Engineer **May, 2022 – November, 2022**

- Developed a website (1800 lines of code) using an HTML/CSS/JavaScript frontend, Python/Flask backend, and MySQL database.
- Utilized Bootstrap, TailwindCSS to streamline development and enhance user experience.
- Deployed the web application using Heroku.

4n6 Research – Undergraduate Research Assistant **May, 2021 – May, 2022**

- Contributed to the composition of a research paper published in IEEE-DASC (2022) that proposed and implemented an innovative technique to reduce the memory requirements of neural networks by up to 6000%.
- Created a novel method to reduce training time of neural networks, resulting in 500 lines of Python code and a comprehensive 10-page technical report outlining the research and results.
- Programmed neural network architectures including Transformers, Residual Networks, and Convolutional Networks using Python.

Highlighted Projects

Machine Learning Principles: Patching Holes **Fall 2022**

- Built Neural Network, Decision Tree models using Python (800 lines of code) to accurately reconstruct blacked-out 300x300 pixel regions in images.
- Implemented gradient descent, back-propagation, correlation calculation, and highest expected information calculation algorithms for successful training.
- Leveraged an ensemble of models, employed Bootstrapping to generate realistic-looking images.

Independent Project: Endless-Runner Style Video Game **Summer 2022**

- Designed and coded an engaging and fun endless-runner style video game using Python, consisting of 600 lines of code.
- Employed sprite sheets and kinematic equations to enhance game visuals and create a realistic gameplay experience.
- Applied a variety of OOP principles to aid in the development of the game, including classes, methods, and functions.