Gilad A. Schneider

201-566-7287 schneider.gilad@gmail.com Bergenfield, NJ

Education

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

- 3.98 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), Java, C, R, Javascript, SQL, HTML, CSS, Linux, Git, LaTex, Neural Networks, Numerical Methods, Nonlinear Programming

Work Experience

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%.
- Developed 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.
- Created neural network architectures including Transformers, Residual Networks, and Convolutional Networks using Python.

PEN America – Accounting Intern **May, 2020 – August, 2020**

- Analyzed general ledger accounts and bank statements to ensure accurate accountability.
- Conducted budgeting, reporting, and other aid for financial analysis.
- Processed revenue, including handling daily deposits and internal expenses.

Highlighted Projects

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

- Developed 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.
- Utilized an ensemble of models, employed Bootstrapping to generate realistic-looking images.

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

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