Benyamin Plaksienko

Fair Lawn, NJ benplaksienko@hotmail.com +1 (347) 279 7732 ben-plaksienko

Benyaminwasnthere

Education

NJIT Ying Wu College of Computing, Newark, NJ *Dec 2024 – Dec 2026*
Master of Science in Artificial Intelligence Track Graduate Certificate Program

- Relevant Coursework: Data Mining

Rutgers University, New Brunswick, NJ *Sept 2020 – May 2024*
Bachelor of Science in Computer Science

- Relevant Coursework: Artificial Intelligence, Machine Learning Principles, Brain Inspired Computing, Computational Robotics, Operating Systems, Software Methodology, Data Management, Systems Programming, Data Literacy, Algorithms Design & Analysis, Discrete Structures, Computer Architecture, Data Structures, Linear Algebra

Work Experience

Data Engineer Research, Clearcut Software LLC, Paramus, NJ *Mar 2024 – Aug 2024*

- Crafted tailored aggregation functions in C++ for DuckDB, aligning precisely with client specifications & conducting thorough unit tests to ensure robustness while significantly enhancing resource efficiency
- Streamlined SQL query creation by developing Python scripts, resulting in a substantial increase in team productivity & efficiency, leveraging NumPy & Pandas for seamless integration
- Utilized advanced programming techniques to enhance performance & ensure smooth integration with existing data analytics pipelines, facilitating clients in efficiently extracting actionable insights from vast datasets
- Resolved technical challenges by debugging and troubleshooting issues using GitHub tickets, ensuring smooth project development and deployment

Projects

Tetris Confetti Website Application **React, Google Firebase Cloud Service, p5.js**

Live Demo: Game **GitHub:** GitHub Project Page

- Introduced a creative spin on the classic Tetris game, featuring tetrominoes bursting into vibrant confetti, integrating unique sand physics, chain detection mechanisms, & real-time score monitoring
- Facilitated real-time score tracking by leveraging Firebase Authentication & Realtime Database, leading to increased user engagement through seamless user authentication & integrated database functionality
- Automated the deployment process with GitHub & Google Firebase Hosting, managing code deployment & hosting tasks efficiently
- Engineered a Custom BFS algorithm for chain detection & bonus scoring, implementing it in Javascript while leveraging skills in data structures & algorithm design
- Enhanced user engagement & overall user experience by implementing responsive design for gameplay on both desktop & mobile devices

Dementia Detection Website Application **Python, Scikit-learn, XGBoost, React Native, FastAPI**

GitHub Main Project: GitHub Project Page **GitHub Data Scraping:** GitHub Data Scraping Page

- AI-Driven Dementia Detection using textual analysis of blog posts written by individuals with and without dementia. This project was developed for HackRU, a Rutgers hackathon held in Spring 2025 by Major League Hacking, in collaboration with teammates. **Awarded second place in the Social Good category**
- Collected and processed 1.4M tokens of text data for training and evaluation
- Generated 1024-dimension sentence embeddings using BGE-large-en-v1.5 transformer model
- Attained an outstanding F1-score of 0.95 using XGBoost in a 5-fold cross-validation setting with a validation set comprising 20 % of our 3,024 training points
- Built an intuitive React Native frontend with themes, multi-screen navigation, and data visualization
- Developed a FastAPI backend with REST endpoints for text analysis and inference

Technical Skills

Languages: Python, JavaScript, Java, C++, SQL, TypeScript, R, HTML, CSS, C#, MATLAB

Frameworks/Libraries: React, Node.js, Django, Flask, Spring Boot, Angular, TensorFlow, PyTorch, Scikit-learn, Bootstrap, Express.js, Next.js, jQuery, NumPy, pandas

Tools: Git, Docker, Kubernetes, AWS, Google Cloud, Jenkins, JIRA, GitHub, Visual Studio Code, Android Studio, LaTeX, Jupyter Notebook, Postman, IDE, Firebase, PostgreSQL, MongoDB, MATLAB