Claudio Perinuzzi

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EDUCATION

Queens College, City University of New York

Master of Arts in Computer Science Bachelor of Arts in Computer Science

May 2025 December 2024

GPA: 3.85/4.00

TECHNICAL SKILLS

Programming: Python, Java, C/C++, JavaScript, HTML/CSS, PostgreSQL, MySQL

Frameworks: React, Streamlit, FastAPI, SQLAlchemy, Pandas, NumPy, PyTorch, JUnit, Scikit-Learn, OpenCV

Tools: Git, GitHub, Jira, Conda, Unix, Bash, Docker, Tableau, eClinicalWorks (EMR)

EXPERIENCE

Software Application Developer/Analyst

May 2016 - Present

East End Hand Surgery

Port Jefferson, NY

- Develop, test, deploy and maintain custom Python applications that seamlessly integrate with EMR systems, streamlining healthcare workflows (e.g. patient schedule creation, intake distribution, billing, secure file encryption) and significantly improving operational efficiency by saving clinical staff 8+ hours weekly.
- Manage comprehensive documentation for custom Python applications and EMR system configurations.
- Act as the EMR administrator and analyst, overseeing system configuration, configuring builds, optimizing performance, managing user access, and troubleshooting to ensure seamless clinical operations.
- Manage critical vendor relationships, serving as the primary point of contact for the EMR provider to troubleshoot issues, coordinate updates, and advocate for system improvements.
- Manage 2+ TB of sensitive patient records, ensuring data integrity, security, and adherence to HIPAA compliance through robust backup protocols and data management best practices.
- Led the successful reorganization of the company's file structure, significantly improving data retrieval and storage efficiency by 2x and directly contributing to increased clinical productivity.

Machine Learning Specialist - LLM Training & Debugging

April 2024 - Present

New York, NY

- Apply Reinforcement Learning from Human Feedback (RLHF) to enhance ML model efficiency.
 - Debug and optimize code, ensuring compliance with ethical standards in data-sensitive environments.

Software Engineering & Data Science Fellow

July 2024 - May 2025

CUNY Tech Prep

Data Annotation Tech

New York, NY

- Selected for a highly competitive year-long fellowship applying modern software engineering practices and system design principles to develop full-stack solutions, utilizing version control and adhering to the SDLC.
- Applied machine learning and data engineering techniques such as, data cleaning, exploratory data analysis (EDA), statistical modeling, data visualization, model evaluation and optimization.

PROJECTS

C-Sphere | GitHub Repository

May 2025

- Collaborated with a team of 3 to build a full-stack web app that intelligently summarizes, organizes and helps users rediscover saved bookmarks through advanced search capabilities.
- Engineered a Retrieval-Augmented Generation (RAG) backend pipeline by combining intelligent content summarization, semantic vector search, and embedding-based storage/retrieval using PostgreSQL, resulting in optimized user data storage and intelligent content querying.

Breathe NYC | GitHub Repository | Live Demo

September 2024

- Developed a Python Streamlit web app using NYC OpenData public datasets to visualize, analyze, and predict yearly/seasonal AQI (Air Quality Index) trends for NYC neighborhoods, achieving 97% accuracy.
- · Leveraged pandas and scikit-learn to build a data cleaning and linear regression machine learning pipeline, delivering actionable insights from raw data via an intuitive interface for critical decision support.

MindfulNet AI | GitHub Repository | Live Demo

- Implemented a full stack web application using React that predicts social media addiction with 98% accuracy and offers personalized healthy habit recommendations based on user interests and location.
- Built a backend Random Forest machine learning model in Java to predict social media addiction given user-provided information, including social media habits and socioeconomic background.

PDF Encrypt | GitHub Repository

• Developed a Python-based Graphical User Interface (GUI) to efficiently encrypt multiple PDFs simultaneously, allowing users to save time by securely encrypting files in bulk.