Miguel Dias Pinto

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Computer Science Engineer

Software Engineering | Machine Learning & AI | Data Analysis & Engineering | Research & Development

I'm a computer science student graduating in December 2025, looking for a full-time role in software engineering, machine learning, or AI-focused development and research.

- **Leadership Experience:** Led teams in multiple development projects, overseeing full-stack architecture, feature implementation, and backend infrastructure.
- **AI & Machine Learning:** Developed AI-powered tools and conducted applied machine learning research, optimizing model performance and deploying intelligent systems.
- **System & Application Design:** Designed and implemented secure, full-stack systems across web, desktop, and game environments.
- **Independent Software Development:** Built and deployed multiple solo projects from the ground up, applying and learning a wide range of programming languages and frameworks.
- **Research & Emerging Tech:** Evaluated and integrated cutting-edge AI technologies into real-world solutions, focusing on innovation and practical deployment.
- **Client & Cross-Team Collaboration:** Worked with clients and cross-functional teams to deliver tailored software solutions using modern platforms and tools.

Skills

- **Programming:** Java, Python, SQL, PowerShell, Jinja, JSON, TypeScript, Git, Swift, C, Lua, C++
- **Frameworks & Tools:** Jupyter Notebooks, NumPy, Matplotlib, Azure AI Studio, Microsoft AI (ML Studio, Copilot Studio), Power Platform, Angular, REST APIs
- **Operating Systems:** Windows, macOS, Unix
- **Software:** Visual Studio Code, Google Colab, Adobe Suite, FL Studio, Logic Pro X, Unity, Unreal Engine
- **Languages:** English (Fluent), Portuguese (Fluent), Spanish (Advanced), French (Advanced), Russian (Intermediate)

Work Experience

Distributed Logic Corp   **Remote**
Junior & AI Developer   12/23 – 02/25
- Developed solutions for internal and third-party companies using SPFx, PowerShell, Power Platform, SQL, and Python.
- Built and integrated AI-powered chatbots with Azure AI Studio using Python and Jinja.
- Designed and managed custom SharePoint solutions using SPFx and Typescript, deploying them for customer use.
- Developed custom data reports using SQL Server.
- Researched, tested, and implemented emerging AI technologies, including Copilot Studio and Azure AI Studio, to assess their viability for business applications.

IMG ARENA   **Rochester, NY**
Data Collector   8/23 – 12/23
- Collected data for games of the NISA Soccer League.

Rochester Institute of Technology   **Rochester, NY**
Customer Service, CTRL ALT DELI   1/22 – 12/23
- Making and taking customer orders, restocking shelves and working at a cash register

Projects

Machine Learning Model Research and Optimization: *(Dec 2024)* **Academic**
- Conducted research on an XGBoost model for predicting expected goals in soccer matches and proposed optimizations.
- Applied hyperparameter tuning to boost recall and precision without sacrificing overall accuracy.
- Analyzed feature importance to identify key predictors and proposed future enhancements for improved predictive power.

Interactive xG Modeling with LLM Integration: (Apr 2025) **Academic/Personal**
- Developed an expected goals prediction model using FIFA World Cup 2018 data and linear regression.
- Engineered data-query functions to analyze shots at player and team levels.
- Integrated a language model to answer natural language questions about match data.
- Demonstrated the potential of combining statistical models with interpretable AI interfaces.

ToonCraft Minecraft Server & Minigames: *(Current)* **Personal**
- Served as lead developer for a custom-made Minecraft server network, overseeing all game logic, infrastructure, and plugin development.
- Designed and built custom minigames using Java, Paper, and Velocity frameworks.
- Implemented SQL based backend systems for player data storage and cross-server communication.
- Demonstrated leadership in managing large-scale multiplayer gameplay features.

Techasaurus E-Store: *(Apr 2023)* **Academic**
- Led development of an e-commerce platform for customizable peripherals using Angular, Java and Maven.
- Designed and implemented RESTful APIs to connect backend services with a frontend built on a Model-View-ViewModel (MVVM) architecture.
- Built core features including user authentication, shopping cart functionality, and product customization tools.
- Developed an admin dashboard for managing inventory and processing orders efficiently.

AI Discord Bot: *(Feb 2025)* **Personal**
- Created a Discord bot using OpenAI API for character-style conversations triggered by name mentions.
- Added admin tools enabling message reposting and content management across servers.
- Demonstrated conversational AI integration with real-time chat platforms.

456Movies Streaming App Simulation: *(Apr 2023)* **Academic**
- Developed a Java-based movie streaming simulation with secure user login and authentication.
- Implemented password hashing to protect user credentials and reinforce application security.
- Integrated a SQL database for storing and managing movie data and user accounts.
- Wrote and executed SQL queries to support content management and user interaction.

Custom Language Interpreter: *(Dec 2024)* **Academic**
- Built a full interpreter for the custom language "Jott" in Java.
- Implemented lexical analysis, parsing, validation, and code execution from scratch.
- Demonstrated understanding of programming language structure and compiler design.

PassBook Password Manager: *(Apr 2023)* **Personal**
- Created a Swift-based iOS password manager with local credential storage.
- Focused on offline-first design and basic security principles for mobile applications.

Battleblox Multiplayer TPS   *(May 2022)* **Personal**
- Solo-developed a multiplayer FPS in Lua for Roblox, including original gameplay mechanics.
- Tuned network performance and gameplay responsiveness for real-time sessions.
- Tested extensively with friends, totaling over 10 hours of multiplayer gameplay, helping identify bugs and refine balance and responsiveness.

Education

Rochester Institute of Technology   **Rochester, NY**
Bachelor of Science in Computer Science, Immersion in Physics   Expected Dec 2025
- RIT Performing Arts Scholar