

Tan Aydemir

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EXPERIENCE

Automation Intern

Intel Corporation

May 2024 – August 2024, Chandler, AZ

- Led the internal testing and development of AiBot, a company-wide AI agent embedded within Microsoft Outlook, connecting 3000+ Intel employees to OpenAI GPT-4.0. The tool handled 15000+ daily user queries, reduced manual workload, and increased operational efficiency.
- Designed and integrated a custom acronym recognition feature into AiBot by accessing Intel's internal acronym database and analyzing user queries using Python's re module and NLP heuristics. Built a script that returned relevant definitions in under one second.
- Formed onboarding documentation and delivered technical presentations to support AiBot adoption across 25+ departments. Led interactive sessions that helped 300+ employees integrate the tool into their daily workflows. Recognized with multiple Intel Awards for driving efficiency.

Integration Development Intern

DFDS

June 2023 – August 2023, Istanbul, Turkey

- Automated XML error detection and resolution by writing 600+ lines of Java code using DOM and SAX parsers, allowing 15 team members to quickly identify and correct issues related to missing or invalid shipping data, which reduced response time to clients by 25%.
- Managed and updated real-time route and container assignment data across 11 vendor pipelines using MySQL Server, executing batch inserts, deletions, and modifications to ensure accurate cargo tracking and minimize misrouted shipments.
- Streamlined GitHub workflow configurations (branch protections, CI triggers, and permission settings) to support a smooth codebase transition during a merger with another firm, ensuring minimal timeline, future scalability, and long-term maintainability.

Software Development Intern

CREAVIT

July 2022 – August 2022, Zonguldak, Turkey

- Implemented client-facing solutions for 60+ enterprise clients by writing Python scripts using re and pandas to perform keyword extraction.
- Integrated outputs with Jira's REST API to automatically direct incoming support requests to the correct engineering teams, reducing triage time by approximately 40% and improving response accuracy and issue resolution tracking across departments.
- Deployed secure data transfer protocols using SFTP and enforced user-level access controls through Azure Active Directory and OAuth2, proactively preventing 7 potential security breaches and enhancing overall system security compliance.

PROJECT

DormQuery

- Modeled building infrastructure in Neo4j and simulated 7 days of occupancy and temperature data using Python at 5-minute intervals.
- Built a web-based query interface with Streamlit and GPT-4o-mini API, supporting real-time natural language interaction with sensor data.
- Engineered custom NLP filters to extract attributes, merge graph and time-series data, and generate contextual LLM-driven insights.

PathFinder AI

- Built a resume classifier in Python using scikit-learn, SentenceTransformer, and pandas, achieving 73% accuracy across 24 job categories.
- Developed features such as 384-d semantic embeddings, resume length, and keyword frequency vectors for high-dimensional classification.
- Tuned Logistic Regression with GridSearchCV to optimize regularization and solver, boosting macro F1-score by 125% on imbalanced data.

AlphaRate

- Designed a signal-based trading strategy in Python to analyze equity responsiveness to long-term interest rate changes.
- Implemented rule-based logic using pandas, NumPy, and Bollinger Bands to generate positions with lag handling and false signal reduction.
- Aligned 250+ days of macroeconomic and Yahoo Finance data; achieved 60% signal accuracy and built reusable backtesting modules.

EDUCATION

Bachelor of Arts in Computer Science

Minor in Business Administration and Management • Boston University • Boston, MA • 2025 • 3.80

• Kilachand Honors College | Presidential Scholar | Dean's List (8 consecutive semesters)

SKILLS

Programming Languages: Python, Java, SQL, JavaScript, R, MATLAB, Go

Tools: MySQL, PostgreSQL, MongoDB, AWS, Snowflake, GitHub, Jupyter, Tableau, Power BI, Streamlit, Apache Kafka, Kubernetes, Docker, Jira

Machine Learning & Data Engineering: scikit-learn, TensorFlow, PyTorch, Pandas, NumPy, XGBoost, Hugging Face, OpenAI API, ETL