LUIS DELOTAVO

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EDUCATION

Western University | *Bachelor of Engineering in Software Engineering*   London, ON
Sep 2020 - Apr 2025

- **Courses:** Data Structures and Algorithms, Operating Systems, Database Management, Computer Networking, Cloud Computing, Web Technologies, Machine Learning, Artificial Intelligence

TECHNICAL SKILLS

Programming Languages	TypeScript, JavaScript, Python, Java, C#, SQL, HTML/CSS
Frameworks & Libraries	Angular, React, Flask, Node.js, Next.js, Express, Numpy, sklearn, Jest
Tools & Technologies	Docker, Grafana, Git, Postman
Cloud Platforms & Databases	Google Cloud Platform (BigQuery), Amazon Web Services (EC2), Firebase, MongoDB, PostgreSQL
Methodologies	Agile, Scrum, Continuous Integration/Continuous Deployment (CI/CD)

EXPERIENCE

J.D. Power | Software Engineering Intern   London, ON
May 2023 - Aug 2024

- Engineered an AI-driven full-stack ETL platform using Angular, TypeScript, Python, GCP, Firebase, and Docker resulting in an average 20% improvement in overall application performance and user satisfaction through user survey feedback.
- Revitalized legacy code by integrating Google BigQuery rollback mechanisms and optimizing SQL database workflows, which reduced system downtime and ensured uninterrupted access to critical data.
- Streamlined Agile processes and bolstered application stability by maintaining comprehensive documentation, prioritizing high-impact Jira tickets, and achieving over 60% unit test coverage with Jest—resulting in a 90% on-time release rate per sprint.

Glendor | Software Development Intern   Remote
May 2022 - Aug 2022

- Developed an AI-based PHI Sanitizer that automated the removal of Protected Health Information from medical data, reducing manual processing time while ensuring compliance with privacy regulations.
- Designed and implemented a Health Level 7 (HL7) to XML conversion algorithm, incorporating web-scraping for header extraction to achieve efficient, reliable data transformation across healthcare datasets.

PROJECTS

Stockr | *TypeScript, Python, Flask, PostgreSQL, React, Firebase Authentication, Docker*
Feb 2025 - Present

- Constructed a full-stack finance application with Flask, PostgreSQL, and Firebase authentication—creating secure RESTful APIs that empower users to manage personalized watchlists, access real-time financial data, and review summarized investment portfolios.
- Orchestrated a Dockerized microservices architecture using Docker Compose to coordinate backend (Flask), frontend (Next.js), and database (PostgreSQL) components, ensuring scalable, robust deployments across development and production.

London Transit Delays Dashboard | *TypeScript, Python, Docker, MongoDB, Grafana*
Sep 2024 - Present

- Launched orchestrated containers with Docker Compose that integrates Grafana, Jupyter Notebooks, MongoDB, and a Node.js environment—facilitating seamless real-time ingestion, transformation, and visualization of transit and weather data.
- Devised advanced data normalization and predictive analytics pipelines on public datasets, resulting in 15+ dynamic Grafana dashboards and prediction models that provide actionable insights and support proactive transit operations.

Cardio Risk Engine | *Python, Jupyter Notebooks, Pandas, Scikit-learn*
Nov 2024 - Dec 2024

- Implemented an end-to-end machine learning pipeline using Python, scikit-learn, and both Random Forest and Neural Network models, achieving 90% accuracy in cardiovascular risk prediction.
- Optimized model performance through comprehensive data preprocessing (binary encoding, one-hot encoding, feature scaling) and targeted feature engineering to reveal key risk factors such as age, BMI, and sleep.
- Tested the model with cross-validation and key metrics (ROC-AUC, F1) to ensure reliable predictions, which improved detection of less frequent heart disease cases and confirmed the model's suitability for early healthcare use.