MARVIN KASSABIAN

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EDUCATION

Michigan Technological University • B.S. in Computer Science, Minor in Mathematics May 2015 University of Ghana • Study Abroad

SKILLS

- Programming Languages: Python (pandas, NumPy, scikit-learn, TensorFlow), R, SQL, Go, Java, C++ , C#, TypeScript, Ruby
- Data Science & ML: Predictive modeling, clustering (K-means), classification, statistical analysis, data visualization (Matplotlib, Seaborn), feature engineering, model evaluation (ROC, precision-recall)
- **Data Processing:** ETL pipelines, data cleaning/wrangling, data migration
- Databases: PostgreSQL, T-SQL, MongoDB, Firebase, database design/optimization
- Data Visualization: Python visualization libraries, communicating insights
- Frameworks and Libraries: Next.js, Vue.js, Angular, React
- Software Engineering: REST APIs, domain-driven design, test-driven development, Agile methodologies
- Languages: Fluent English, Conversational Thai

Professional Experience

Superior Technologies Research • Senior Software Contractor

May 2025 - Present

Fall 2015

- Developing an HR performance-tracking platform with a Vue.js frontend and Go backend to streamline employee goal management and progress tracking.
- Leveraging Arden Labs' Go architecture to enforce a robust, testable paradigm, improving code maintainability and reliability.

Calder Solutions • Part-Time Software Developer

July 2024 - Present

- Developed the frontend of an educational platform using Next.js, enabling teachers to create, schedule, and publish lessons with integrated questions.
- Utilized PayloadCMS for managing lesson content and Firebase for handling student responses.
- Collaborated with the design team and incorporated customer feedback to ensure the website is user-friendly, accessible, and meets client requirements.

Michigan Immigrant Rights Center • Data Analyst

April 2024 - April 2025

- Reported and audited data from internal SalesForce system to funders, enabling better activity monitoring and facilitating additional funding opportunities.
- Developed automated scripts to import and reconcile funder data, streamlining end-of-month auditing processes with up-to-date information.
- Created comprehensive data visualizations using Python to showcase organizational impact, highlighting employee achievements throughout 2024.
- Enhanced and maintained R code for monthly data processing, improving efficiency and accuracy of reporting.
- Implemented Python scripts to clean and correct archival data, resolving critical funding-related data integrity issues prior to April 2025 deadlines.

Superior Technologies Research • Senior Software Contractor

September 2021 - March 2024

- Decomposed legacy PHP and ASP.NET monolith codebase into domain-specific Go services with a Vue.is frontend.
- Utilized Ginkgo and Gomega to ensure that transitioning from a monolith to domain-specific services maintained feature parity, adhering to Test-Driven Development (TDD) principles.
- Created a Go-based API to streamline accounts payable integration between Medius and Microsoft Dynamics GP, utilizing calls to the Medius API to retrieve necessary data.
- Created technical documentation and provided hands-on support to teams for tagged deployment process changes, including tutorials on the new deployment method.
- Refactored repositories to adhere to domain-driven design (DDD).
- Contributed to a Go library aimed at standardizing service creation, enhancing DevOps capabilities for service management.
- Rewrote Node.js services in Go for improved maintainability.
- Updated legacy codebase for multi-currency support and enhanced data security.
- Developed a robust expense processing integration that transforms Expensify data into consumable models.
- Converted legacy T-SQL stored procedures to maintainable Go code.

eoStar • Software Developer

August 2016 - September 2021

- Performed K-means clustering analysis with scikit-learn to identify customer segments and purchasing patterns, providing actionable insights for marketing and inventory strategies.
- Trained and evaluated a classifier for predicting purchasing behavior using scikit-learn and custom data processing, optimizing model performance through precision-recall analysis and ROC curve visualization.
- Built and deployed a TensorFlow-based machine learning model from sales data on end-user iOS devices.
- Developed a RESTful API in ASP.NET Core for daily data transfers to third-party software.
- Led projects involving order suggestion and voice assistant functionalities, utilizing machine learning models.
- Enabled tax data uploads through integration with the Zambia Revenue Authority.
- Designed and implemented backend systems for Zambian integration in ASP.NET Core.
- Collaborated with a third-party team to resolve data ingestion issues by assisting their developers with Ruby code.
- Supported and developed a Xamarin.iOS app to facilitate transactions for field users.

eoStar • Data Migration Specialist

February 2016 - August 2016

- Performed ETL (Extract, Transform, Load) operations to integrate databases from newly acquired clients into the company system using T-SQL.
- Enhanced a legacy C++ application by integrating a SQL export feature, facilitating seamless data conversion from proprietary database systems, and improving data extraction and transfer processes between client systems and our platform.

Jackson National Life Insurance • Software Developer

Spring 2013 - *Summer* 2015

- Led a team of three to migrate databases, troubleshoot bugs in multiple Access GUIs and databases based on end-user feedback, and deployed database migrations and fixes to production.
- Collaborated within a team of five to develop a Java-based application for aggregating employee hours and generating schedules.
- Contributed to developing an application to streamline the recruitment and hiring process.
- Developed a Java application in a team of four to report programmer performance to managers.

COMMUNITY INVOLVEMENT

A Place For Us • Web Developer Volunteer

Winter 2024 - Present

• Develop and maintain website for nonprofit establishing an inclusive shelter for unhoused individuals.

Care Collective • Safety Coordinator & Trainer

Spring 2023 - Present

- Provide preventative care and safety support at community events.
- Co-authored consent-based care training manual and facilitate sessions for 20+ participants.

Let Our Voices Echo • Meal Program Volunteer

Spring 2023 - Present

- Coordinate weekly meal preparation and distribution for underserved communities.
- Manage inventory and distribution of essential supplies.

Sundays In Cass Park • Meal Program Volunteer

Spring 2021 - *Spring* 2023

- Organized weekly community meals in Detroit, serving 50+ individuals weekly.
- Managed supply inventory and financial reimbursement processes.