MOHAMMED TIJANI

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PROFESSIONAL EXPERIENCE

YRBIS Queens, New York

Founder/Developer (Self Employed) May 2025 – Present

Tech Stack – Nodejs, Cloudflare, AWS, Postmark,

- Engineered robust, self-hosted Linux API servers, implementing HTTPS and token-based authentication to deliver secure and high-performance web services.
- Managed end-to-end web deployment, from domain registration and DNS to SSL provisioning, and utilized Cloudflare Tunnels for reliable client site hosting, achieving 99.99% uptime.
- Developed and integrated Google Analytics dashboards for comprehensive real-time visitor metrics and conversion funnels, persisting data in AWS DynamoDB for scalable analytics.
- Optimized website performance by integrating image compression and CDN, resulting in a 60% reduction in page-load times and improved SEO.
- Successfully acquired two paying clients within the first month of operation through strategic competitive positioning, fostering strong client relationships.

The Research Foundation for The State University of New York Albany, New York

Undergraduate Research Assistant March 2025 – May 2025

Tech Stack – Python, Pandas, NumPy, Matplotlib, scikit-learn

- Assist with the deployment, calibration, and maintenance of high-grade air quality instruments and low-cost sensor servicing.
- Processed, cleaned, and validated large-scale air quality datasets, 16,000+ data points over 2 years to prepare data for analysis and modeling.
- Developed Python scripts utilizing Pandas and Matplotlib to generate comparative data visualizations, such as customized box plots, for analyzing air quality trends and anomalies across different monitoring network types (e.g., NYC Mesonet, Micronet).
- Engineered features (e.g., one-hot encoding for location/season) and trained a Random Forest Classifier model on extensive datasets (750,000+ data points) to predict pollutant types based on environmental and temporal features.
- Analyzed and interpreted complex air quality data by creating statistical summaries (e.g., model performance metrics) and visualizations (e.g., classification heatmaps, feature importance plots) to identify patterns.

BEAM Manhattan, New York

Math Teaching Assistant Intern July 2024 – August 2024

- Mentored and guided 20+ middle school students through a 100-problem challenge, covering foundational and advanced mathematical concepts including Game Theory, Number Theory, and Combinatorics.
- Designed and implemented hands-on teaching methods, utilizing physical objects and manipulatives, using blocks to model combinatorial possibilities, colored tokens for game theory payoffs, or demonstrating logic puzzles like the counterfeit coin problem with actual coins as class-wide visual aids to explain abstract concepts.

Flash Application Remote, New York

Development Lead March 2019 – August 2022

Tech Stack – .NET, C#, Java, Redis, MySQL, Git

- Developed and launched a flash game, building a community on social applications of 5,500 members over 3 years.
- Led a team of 4 developers and 5 artists to release frequent updates and design new mechanics (e.g., Projectile Ricochet, Community Market, Battle Pass, Global raids) to meet player base demands.
- Migrated the database of 5000+ players from MySQL to Redis, leveraging the in-memory storage and data structures to make the query time up to 4 times faster, offering a smoother gameplay experience at a cheaper cost.
- Managed a team of 20+ members, improving cross-functional communication and data accessibility by implementing data replication and synchronization between European and U.S. servers (enabling real-time updates/collaboration), and organizing team tasks using Discord and GitHub for enhanced visibility.
- Achieving 15-35% monthly player growth consistently over a year, generated $10K in annual revenue, and drove a game runtime of 99.8%.

PROJECTS // *https://motijani.github.io/mtijani/#projects*

CAPSTONE

CGM Application

Tech Stack: JS, expo, Python, Tableau Public, NumPy, Pandas, Git, React

- Identified a growing need for proactive diabetes management tools that not only monitor but also predict glucose fluctuations.
- Trained a Machine Learning model using the Deep Forest algorithm in Python on historical time-series glucose level data (14M+ data points from 400+ individuals), leveraging university high-performance computing resources to generate predictive insights (e.g., caution alerts).
- Designed and delivered a Continuous Glucose Monitoring (CGM) application with real-time glucose monitoring by integrating various user health inputs (e.g., meal logs, activity data), a predictive tool analyzing trends every 5 minutes via server API calls, and data visualizations (e.g., glucose trend graphs using Tableau Public and react-native-chart, predictive alerts for potentially abnormal levels) to empower end-users.

EDUCATION

University at Albany GPA: 3.79

Degree: Bachelor of Science (B.S.) in Computer Science and Applied Mathematics; Minor in Mathematics Expected Graduation: May 2025

Skills: Java, JavaScript, HTML, XML, CSS, Frontend, Power BI, MS Office Suite, Statistical Analysis, Cloud Computing, Version Control, GitHub, Amazon Web Services, DynamoDB, EC2, Lambda, S3, PostgreSQL, Insomnia, MATLAB, Embedded Systems, Kubernetes, Docker, Shell, PowerShell, Git, ETL Processes

Tau Epsilon Phi, Incorporated (*New Member Educator)*