

# Mohamed Elarbi

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## Education

### Eastern Michigan University

Bachelor of Applied Science in Computer Science

April 2024

GPA: 3.72

## Experience

### Application System Analyst Co-Op/Intern

October 2023 – Present

Daifuku North America, Inc.

Novi, Michigan

- Collaborated with a team in designing and developing a portal web application on Microsoft Dynamics 365 CRM supporting over 10,000 users, employing features of Microsoft Power Apps, HTML, SQL, and JavaScript, ensuring a user-friendly experience.
- Revamped a budget tracking application on the ServiceNow platform for the IT department overseeing millions of dollars in budgets and actuals, leveraging JavaScript and relational database tables, ensuring precise budget allocation tracking.
- Streamlined timekeeping in ServiceNow with a Power Automate flow and raw JSON data, sending automated weekly reminders to team members with overdue timesheets. Reducing overdue submissions by 20% and improving overall timekeeping efficiency.

### Software Engineer Intern

May 2022 - August 2022 & May 2023 - August 2023

Rocket Mortgage LLC

Detroit, Michigan

- Collaborated with a cross-functional team of over 10 members to enhance and manage an internal website, leveraging Angular as the front-end framework and .NET as the backend solution; using LINQ to query records stored in MySQL Databases on AWS.
- Spearheaded the successful production deployment of 3 critical applications to Amazon Web Services (AWS) using CircleCI pipelines, resulting in enhanced operational efficiency and seamless deployment processes.
- Spearheaded the development and implementation of 2 Terraform configurations for service deployment on AWS, optimizing the infrastructure setup for maximum efficiency and scalability.
- Demonstrated a commitment to code quality by designing and executing unit tests for both Angular and .NET applications, achieving a 90% code coverage standard for all code written.

### Information Technology Apprentice

September 2021 – March 2022

NPower

Detroit, Michigan

- Attained proficiency in training on diverse hardware and software aspects of computers, acquiring comprehensive knowledge of fundamental components and functionalities, and completing over 100 hours of training.
- Developed an in-depth understanding of TCP/IP and networking principles, completing over 3 network configuration projects, and effectively demonstrating proficiency in establishing network connections.
- Completed 3 cybersecurity projects, showcasing a keen understanding of best practices in data security.

## Projects

### Portfolio Web Application | Python, Flask, SQLite3, HTML, CSS

- Implemented a functional portfolio web application using the Flask framework that showcases personal skills and experiences.
- Leveraged SQLite3 to efficiently store and manage a database of over 3 user-generated testimonials, enhancing interactivity.
- Integrated a contact page that utilizes the Gmail API to forward contact information, resulting in over 15 contact request processes.

### Loan Classifier Program | Java, Machine Learning

- Created a Java program for categorizing over 50 loan applicants as low-risk, medium-risk, high-risk, or undetermined.
- Implemented the K-nearest neighbor algorithm in a Machine Learning approach with training and validation data for accurate risk assessment, having a validation error rate of less than 10%.

### Secure/Unsecure Web Application | Angular, Spring boot, PHP, HTML, CSS, Typescript, Java, MySQL

- Developed a secure book-ordering web application using Angular, implementing industry-standard security measures such as JWT Tokens, Password Hashing, Data Integrity, input sanitization, and routing authorization to ensure a high level of security.
- Additionally, created a nearly identical book-ordering web application with minimum security standards, showcasing vulnerabilities such as SQL injection and lack of password hashing for educational purposes.

## Skills

**Languages:** HTML, PowerShell, Java, Bash, C, C++, Python, Swift, C#, Terraform, CSS, JavaScript, TypeScript, PHP, SQL, LINQ

**Technologies:** .NET, Angular, Flask, Nodejs, Unit Testing, Git, AWS, Docker, CircleCi, Heroku, ServiceNow, Power BI, Power automate, Spring boot, Dynamics365 CRM, Power Apps