Omkar Sunil Karnik

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[Github](#) | [Portfolio](#) | [LinkedIn](#)

SKILLS

Programming: Javascript, Python, SQL

Front-End: ReactJS, HTML, CSS, JQuery, Ajax

Back-End/Database: NodeJS, Express, MongoDB, MySQL

Cloud Technologies: Microsoft Azure, Heroku, Docker, Bitbucket Cloud

Version Control: Git

Familiar: Java, Tableau, Matlab, PHP, Agile/Scrum, Numpy, Pandas, Matplotlib, Bootstrap, TensorFlow, Postman

PROJECTS

Secure Password Manager System using MERN stack (Mentored by Summer Nguyen, Dev Ops Lead NOVOBI)
- Developed a password management portal similar to Passbolt, securely allowing users to store, edit and share passwords among their team members.
- Encrypted the passwords using private and public key pair and created the chrome extension to store the private key on the browser to decrypt the password.
- Implemented RESTful APIs using Node.js and Express.js and authenticated the user using JWT token.
- Documented the project by creating a report that describes the project's objectives, outcomes, requirements, including use case diagrams and sequence diagrams, which improved project understanding.

Web Chat Application and basic Chatbot using Node.js, Express.js, HTML, CSS, and socket.io
- Created an application for a graduate course, allowing users to communicate with multiple users through chat messages.
- Adopted AGILE methodology for the project plan and built three distinct microservices for login, signup, and storing chat history.
- Implemented real-time communication functionality in the web chat application using Socket.io programming.
- Hosted the Microservices on Microsoft Azure, Bitbucket Cloud, Heroku and programmed the CI/CD setup for automatic deployments.

Audio Classification Android Application Using TensorFlow Lite
- Built an Audio Classification Application using Python that listens to the user's voice and predicts the alphabet spoken.
- Collaborated with other teams to record and acquire a dataset of the voices of 10,000+ people of different cultures.
- Trained the neural network model using the dataset and achieved an accuracy of 65%.

EDUCATION

University of Dayton   **Dayton, Ohio**
Master's of Computer Science   *Expected Graduation Date: May 2023*
Cumulative GPA: 3.96
Relevant Coursework: Cloud Computing and Applications, Algorithm Design, Language-Based Security, Data Visualization.

University of Mumbai   **Mumbai, Maharashtra**
Bachelor's of Computer Engineering   *Graduated in October 2020*

WORK EXPERIENCE

The Sparks Foundation   **Remote**
Data Science and Business Analytics Intern   *May 2021 - June 2021*
- Utilized linear regression to predict supervised ML tasks, achieving 90.3% accuracy and improving prediction rate by 30%.
- Implemented K-means clustering algorithm on the IRIS dataset using the elbow method to determine the optimal number of clusters, visually represented by a scatter plot.
- Conducted Exploratory Data Analysis on the Superstore dataset to identify profitable and loss-making product categories, as well as determined 3 products that should be discontinued from the loss-making category.

LEADERSHIP EXPERIENCE

University of Dayton Information Technologies (UDIT)   **Dayton, Ohio**
Classroom and Event Support Assistant   *October 2021 - Present*

- Facilitated event management for 25+ events and offered technical assistance to board members, faculty, and students for the smooth execution of all events and activities.
- Improved incident management by utilizing the Teamdynamix portal to monitor and resolve an average of 11 daily incidents, collaborating with team members and customers to deliver prompt and effective technical support.
- Performed hardware & software diagnostics and analyzed them to understand system issues and create detailed reports.
- Instructed and equipped 6 new student employees with the necessary skills to effectively resolve daily incidents.