Sourav Shrikant Shetye

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EDUCATION

The University of North Carolina at Charlotte, Charlotte, NC   **Aug 2023 - Present**
Master of Science in Computer Science
Coursework: Intelligent System, Mobile Application Development, Network Based Application Development, System Design

Vidyalankar Institute of Technology, Mumbai, Maharashtra   **Jul 2017 - May 2021**
Bachelor of Engineering in Computer Science
Coursework: Structural Programming Approach, Object Oriented Programming, Machine Learning, Database Systems, Advance Algorithms, Operating System, Software Engineering, Data warehousing and Mining, Artificial Intelligence, Big Data and Analytics, Cloud Computing

WORK EXPERIENCE

Graduate Teaching Assistant - University of North Carolina Charlotte, USA   **Aug 2024 - Present**

- Used innovative teaching strategies and resources to improve the student engagement and foster learning. Which resulted in increased student participation and collaborative environment
- Assisting in development of the backend for an advanced E-Learning platform using Node.js, PostgreSQL, and GraphQL, integrating features like course creation, real-time video classes, and secure content access under Prof. Fabio Nolasco

Software Engineer - Tata Consultancy Services, Mumbai, India   **July 2021 - July 2023**

- Collaborated within a production support team for Westpac Bank Australia, leveraging industry-standard software such as JIRA, ServiceNow, Microsoft Visual Studio, and Microsoft SQL Server
- Integrated SQL query optimization and monitoring methodologies, yielding a 20% boost in error resolution efficiency and significant reductions in system downtime
- Key contributor to Westpac Bank's website development and maintenance, specializing in front-end and backend development.
- Worked with the team to design a robust solution for monitoring employee work hours, resolving operational challenges including unified approval workflows and the implementation of a singular tracking system
- Developed RESTful APIs to support features such as dynamic reporting, automated approval workflows, and personalized notifications. Enabling real-time data synchronization between front-end dashboards and backend
- Ensured all APIs follow the strict security protocols, including OAuth 2.0 authentication, and complied with banking regulations, maintaining data integrity and user privacy
- Conducted rigorous testing and debugging of various components, resulting in a 30% increase in app stability which reduced crash rates

ACADEMIC PROJECTS

Ecommerce Application using MERN LINK   **May 2024 - Jun 2024**
- Developed a full-featured role-based access control (Admin/User) e-commerce platform using the MERN stack with secure authentication using JWT
- Implemented key e-commerce functionalities, including add-to-cart, filters to show relevant products, admin controls, similar product recommendations, and integrated a payment gateway for seamless transactions
- Built modular backend architecture with separate controllers for efficient management of product filtering, pagination, and user data

Wave2Lip: Lip Syncing Real-Time Audio with Image LINK   **Jan 2024 - May 2024**
- Integrated Wav2Lip project, utilizing PyAudio for audio processing, Flask for server-side implementation, and a sophisticated inference mechanism for real-time audio to lip movement conversion
- Achieved real-time lip-syncing functionality, capturing audio using PyAudio while simultaneously processing image frames and generating synchronized lip movements based on the audio input

Personal Budget Application using Angular LINK   **Nov 2023 - Dec 2023**
- Created and deployed a single-page website on DigitalOcean for personal budget tracking. Utilized Angular, Node.js, and MongoDB showcasing advanced programming skills and creativity in website design.
- Executed a comprehensive backend solution utilizing MongoDB as a robust NoSQL database to securely manage user data, leading to an improvement in data accessibility and integrity

SKILLS

- **Languages:** C/C++, Java, Python, JavaScript, TypeScript, Kotlin
- **Web development**: AngularJS, React, CSS, Bootstrap, HTML5, PHP, NodeJS, Express, Django, Flask, GraphQL
- **Libraries and Frameworks:** NumPy, TensorFlow, PyTorch and Pandas, Matplotlib, Keras, PySpark, Spring Boot, .NET
- **Databases:** MySQL, PostgreSQL, NoSQL, MongoDB, S3
- **Tools and Platforms:** Android Studio, Docker, GitHub, Microsoft Studio, ServiceNow, Jira, AWS, Azure, Kubernetes

EXTRACURRICULAR ACTIVITIES

- **Online Courses/Certificates:** Data Structures and Algorithms: Deep Dive using Java (Udemy), The complete JavaScript Course 2024: From Zero to Expert (Udemy), Oracle Database Management Course (Oracle), Machine Learning A-Z: AI, Python & R(Udemy)