Swapnil Bade

+1 934-263-2991 | swapnilpandura.bade@stonybrook.edu | Linkedin

EDUCATION

Stony Brook University   Stony Brook, NY
Master of Science in Computer Engineering   *Aug 2023 - Present*
- Coursework: Distributed Systems, Computational models, Digital Image Processing

University of Pune   Pune, MH
Bachelor of Engineering in Electronics and Telecommunication   *Aug 2016 - May 2020*
- Coursework: Data Structures and Algorithms, Operating Systems, Machine learning

TECHNICAL SKILLS

Languages: Java, Python, JavaScript, C++, HTML, CSS
Technologies/Frameworks: React JS, Angular, Django, Node JS, Spring boot, Azure, MySQL, TCP/IP, JSX, Redux
Tools: Azure Kubernetes (AKS), Git, Docker, VS Code, Eclipse, Selenium, TestNG, Maven
Skills: Microservices, Full Stack Development, Object-oriented Programming, Software Development Life Cycle(SDLC)

EXPERIENCE

Centre ValBio   Jan 2024 – Present
Database Development Research Assosciate   *Stony Brook, NY*
- Collaborated in the development of a full-stack data application, utilizing tools such as **Django, Angular.**
- Executed precise file CRUD operations using **Elasticsearch**, ensuring accurate data translation and ingestion.
- Boosted API response speed by 30% through the integration of **multithreading** in search architecture.

Accenture   Jan 2021 – Jul 2023
Application Development Analyst   *Pune, MH*
- Engineered high-performance RESTful APIs using frameworks such as **Node JS**, and **Django**, facilitating seamless data transfer in client-desired JSON and XML format, enhancing overall system performance by 40%.
- Spearheaded development of 2 interlinked websites for BT using **React.js, Next JS** and the **React Flux** architecture, seamlessly integrating UIand optimizing state management through **Redux** for a centralized state.
- Integrated 50+ user-facing elements made by front-end developers with server-side logic using the **reverse proxy**.
- Contributed to the designing of the database schema and created stored procedures, and views, in **MySQL**.
- Incorporated Cron-based schedulers for periodic job triggers improving system productivity by 40%.
- Engaged collaboratively with more than 8 diverse teams for strategic planning and requirements from stakeholders.

UBT Technologies   Sep 2018 – Feb 2019
Software Developer Intern   *Pune, MH*
- Constructed a microservice application that allows to create users, register hotels, and send feedback.
- Developed distinct services for modular functionality, ensuring seamless client-server communication.
- Introduced diverse databases for various services and ensured fault tolerance in **microservices** through the integration of a circuit breaker and rate limiter.

PROJECTS

Fault-Tolerant Key value Store | *C++, Distributed Systems*   Aug 2023 - Dec 2023
- Developed a resilient key-value store with **RAFT** consensus for data reliability, high availability, and system resilience. Achieved fault tolerance and seamless 2x data replication.
- Implemented key-based sharding for enhanced parallelization, reducing RPC overhead by 50%.

UDAN Application | *Java, Spring-Boot, MySQL, RestAPI, React JS, Node JS*   Nov 2019 – Jan 2020
- Led the conception and development of the web application UDAN, which delivers a comprehensive suite of flight-related functionalities, including seamless ticket booking and detailed booking information retrieval
- Employed cutting-edge technologies such as Spring Boot for the back end and ReactJS for the front end, orchestrating a harmonious integration to ensure a robust and user-centric web experience.

ACHIEVEMENTS

- Team leader for E-yantra national level competition where we were among the top 10 teams in India.
- General Secretary of the Electronics and Telecommunication Department at Pune University.