Dhruv Shah

Stony Brook, New York

📞 +1 (631)428-9751 | ✉ dhruvshah8112002@gmail.com | 🔗 Dhruv-Shah | 🐙 DhruvByteCode | 🌐 Portfolio

EDUCATION

Masters of Science in Computer Science	**Aug 2024 - Jun 2026**
Stony Brook University	**New York, USA**

- Course Work: Analysis of Algorithms, Data Science Fundamentals

Bachelor of Technology in Computer Science	**Jun 2020 - May 2024**
Nirma University : **CGPA 8.61 / 10.0**	**Gujarat, India**

- Course Work: Operating Systems, Software Engineering, System Design

SKILLS

Languages	: Java, JavaScript, Bootstrap, C, CSS, HTML, C++, C#, Python, Kotlin
Frameworks and Databases	: React.js, Node.js, Spring Boot, SocketIO, Express.js, MySQL, MongoDB, Oracle SQL
Libraries	: NumPy, Pandas, SciPy, Seaborn, Tensorflow, Pyspark, Keras, Scikit-learn, PyTorch, OpenCV, NLTK, Matplotlib, Librosa
Tools and Platforms	: Git, GitHub, Docker, Spark, Hadoop, Power BI, SAP B-1, Android Studio, Firebase

WORK EXPERIENCE

Software Engineer | MindQuad Solutions, Gujarat, India — **Jun 2023 – May 2024**

- Engineered Gate Pass and Quality Control modules using **ASP.NET(C#) and SAP B1**, integrating real-time data from industrial weighing scales to SAP, boosting operational efficiency by 30% and achieving 98% accuracy in weight tracking.
- Worked closely with a cross-functional team to architect, develop, and rigorously test a high-performance scalable system, streamlining quality control workflows by automating and integrating processes across Inward, In-Process, and Pre-Dispatch stages, leading to enhanced compliance within the SAP environment.
- Created and deployed advanced reporting solutions using **Crystal Reports**, enabling transformative data-driven strategies with sophisticated **visualizations and real-time analytics**, significantly slashing reporting time by 40%.

Software Developer | Spinfluence Digital, Gujarat, India — **May 2022 – Jul 2022**

- Led full-stack development of a website using **Spring Boot and MySQL**, implementing advanced features like asynchronous data processing and caching to enhance responsiveness and security, resulting in a 60% reduction in page load times.
- Spearheaded API responsiveness improvements, reducing latency from 4 seconds to 1 second, and established robust security protocols using **OAuth 2.0 and JWT** authentication, bolstering data integrity and access control.
- Facilitated strategic discussions with non-technical stakeholders, effectively bridging the gap between technical and business aspects; this collaborative approach resulted in a 25% reduction in project implementation time.

Data Scientist | ShapeAI — **Jun 2021 – Aug 2021**

- Optimized **YOLO-based object detection** for manufacturing, achieving 97.5% mAP and 50 FPS, applied to counting items like bottles and boxes in high-throughput manufacturing environments.
- Orchestrated the YOLO system, embedding intelligent quality assurance to detect even the tiniest defects in bottles and boxes; automating detection, eliminating subpar products, and reducing defect rates.

PROJECTS

CodeCraft Co. | *React.js, Tailwind CSS, Node.js, Express.js, MongoDB, Socket.io* | GitHub

- Developed CodeCraft Co., a web application for hosting coding contests, leveraging **React, Tailwind CSS, Node.js, Express, and MongoDB** to efficiently manage a growing user base.
- Integrated Socket.IO for real-time ranklists and submissions, ensuring sub-200ms response times, and incorporated the Codeforces API to provide a diverse problem set.
- Strengthened user security by implementing robust authentication systems, including secure sign-up, email verification, and login protocols, effectively reducing the risk of account breaches and enhancing overall platform integrity.

Aahar Application | *Android Studio, Java, Glide* | GitHub

- Innovated the Aahar app in **Android Studio using Java**, architecting a user-friendly interface and integrating **Firebase backend**, while targeting a reach of up to 500 users in initial simulations.
- Engineered secure and reliable transactions by implementing **AES encryption** and leveraging **Firebase** Realtime Database, while designing and simulating partnerships with 10 local NGOs to streamline food donation processes.
- Integrated **Twilio API** for automated SMS notifications to donors and NGOs, and utilized the Retrofit library to interact with a **RESTful API**, enabling real-time updates on NGO locations and current donation needs.

EduManage: GUI Based Student Examination Management System | *Python, MySql, Tkinter* | GitHub

- Built EduManage, a GUI-based Student Examination Management System in **Python using Tkinter**, effectively managing student data, exam details, results, and attendance.
- Refined data operations by integrating MySQL, incorporating sophisticated features for managing student and subject information, result tracking, and attendance supervision.

POSITION OF RESPONSIBILITY

Graduate Teaching Assistant for Digital Intelligence	Stony Brook University	**Aug 2024 - Present**
Vice President	Computer Society of India, Nirma University	**Nov 2022 - Oct 2023**