KEYANSHU GARIBA

(857) 492-8869 • gariba.k@northeastern.edu • linkedin.com/in/keyanshu • Boston, MA

EDUCATION

Northeastern University

Boston, MA

Master of Science in Software Engineering Systems, GPA: 4.00

Expected April 2025

• Relevant Coursework: Object Oriented Design, Program Structures and Algorithm, GenAI, Software Engineering and Agile Methodologies, Web Design/User Experience Engineering, Business Analytics

Pandit Deendayal Energy University

Gandhinagar, India

Bachelor of Technology in Computer Engineering, GPA: 3.91

Aug 2019 – May 2023

• Relevant Coursework: Data Structures and Algorithm, Cloud Computing, Operating Systems, Database Management Systems, Design and Analysis of Algorithms, System Software and Compiler Design, Design Patterns and Introduction to Artificial Intelligence

SKILLS

Programming Skills: Python, Java, C/C++, JavaScript, CSS3, HTML5, Ruby

Frameworks: React, Spring Boot, TensorFlow, Lang Chain, Node, Hadoop, PySpark, Django, Flask

Tools: GitHub Actions, Scikit-learn, Keras, NumPy, Pandas, Hugging face, OpenCV, Matplotlib, Seaborn, PyTorch, Agile, OpenAl, Linux

Applications and Databases: MySQL workbench, NoSQL, PostgreSQL, MongoDB, PHP, Tableau, GitFlow, Excel, Jenkins, AWS

EXPERIENCE

Creomotus Designs Pvt Ltd (Formerly: Two Words)

Mumbai, India

Software Development Intern

Jul 2022 - Aug 2023

- Designed an innovative database management system that consisted of unique interdepartmental operations using **MySQL** and **Java** technologies to optimise construction site operations across ten departments into a unified system that streamlined project management processes that resulted in cutting down paperwork by 80% and reduced the error rates by about 30%.
- Reduced data redundancy by 40% and leveraged **Spring Boot** and **REST APIs** to introduce an innovative approach of user-defined automated purchase orders, setting a new benchmark in time efficiency and data accessibility.

TechEniac Services LLP Ahmedabad, India

Full Stack Development Intern

Jan 2022 – Jun 2022

- Implemented responsive front-end interfaces across diverse websites using **HTML**, **CSS3**, **JavaScript**, **Bootstrap**, **and React** that led to 25% drop-in bounce rate and a 30% rise in session duration through user-friendly responsive design.
- Streamlined user interface development by leveraging **Bootstrap** and **React** to reduce development time and boosting page accessibility. This approach improved page load times and user satisfaction by about 15%, evidenced by increased traffic and superior conversion rates.

PROJECTS

Text-to-Image Generation Using Latent Diffusion & Fine-Tuned CLIP | Link

- Developed a text-to-image generation model using a latent diffusion approach, fine-tuning CLIP model on a Flicker8K dataset with 8,000+ image-caption pairs while using pre-trained VAE and U-Net models from OpenAI.
- Implemented and trained the model using **PyTorch**, **Hugging Face**, **Transformers**, **and TensorFlow**. Fine-tuning improved efficiency by approximately 42%, as measured by BLEU score comparisons, enhancing vision-language alignment for high-quality image synthesis.

Luggshare | Link

- Built a platform called 'Luggshare' that revolutionizes travel by enabling travellers to monetize unused luggage space, offering an efficient shipping alternative, thus enhancing logistical efficiency and providing cost-effective solutions for both travellers and recipients.
- Leveraged the power of the **MERN stack**, integrated **MongoDB** for efficient database management, **Express** for simplified backend operations, **React** for creating an engaging user interface, and **Node.js** for ensuring robust server-side application performance.

Automobile Manufacturing Database Management System | Link

- Devised a Database Management System (DBMS) for the car manufacturing industry to manage data across approximately 15 different departments within an automobile manufacturing unit. The primary objectives include streamlining operations, boosting efficiency, and aiding scalability to enhance production and revenue, a related research paper was published. (Reference code: IJATM-82398).
- This comprehensive **DBMS** utilizes **MySQL** and **AWS EC2 Instance**, utilizing the **Relational Model** and **Entity Relational Model** to seamlessly connect 15 departments and streamline data management processes. Reduced data retrieval by 27% and increased production efficiency by 15% compared to the traditional system used by the company.

OS Process Scheduler: Interactive Visualization Tool | Link

- Crafted an advanced GUI application for demystifying process scheduling algorithms in operating systems, focusing on interactive and educational user experiences.
- This project encompassed extensive front-end development using technologies such as **JavaScript** and **React** for dynamic user interfaces, coupled with back-end logic computed in **Python** to simulate various scheduling algorithms with 100% accuracy.