Aakansha Sigar

LinkedIn| Portfolio | Github

Email: aakanshasigar@gmail.com
Mobile: +91-7683043326

EDUCATION

Indian Institute of Technology, Kharagpur — July 2020 - June 2022
Master of Science - Mathematics; GPA: 8.84 — *Kharagpur, India*
Courses: *Graph theory and Algorithms, Liner Algebra, Cryptography and Network Security, Probability and Statistics, Databases*

University of Delhi — July 2017 - June 2020
Bachelor of Science(Honors) - Mathematics; GPA: 9.48 — *Delhi, India*

TECHNICAL SKILLS

- **Languages** :   C++, Python, Golang, Javascript, React, NodeJS, HTML/CSS, MongoDB, SQL
- **Software** :   Jupyter Notebook, Postman, Siemens NX, Teamcenter, Visual Studios, GIT, Polarion
- **Platforms** :   Windows, Linux
- **Certifications** : Specialization Certificate in Algorithms, Design Patterns in Modern C++, Linux OS, Go: The Developer's Guide, Python Data Structures

EXPERIENCE

Siemens Digital Industries Software — July 2022 - Present
Software Engineer — *Pune, India*

- **Assemblies Visualization Project**: Collaborated on a key project in NX-Assemblies team with 8 cross-functional teams across 3 release cycles, contributing to a early release project delivery. Facilitated the integration of Standard Visual Materials within multi-level assemblies

- **Assemblies Small Strategic Customer Enhancements**: Managed customer enhancements, delivered robust assistance in loading Datum Coordinate Systems, accommodating 3 PMI configurations, 5 loading preferences and 2 NX environments within the monolithic Jts

- **Facet to Parasolid (Classic/Convergent/Hybrid)**: Implemented a cutting-edge data integration system that imported Facetted data from diverse CAD platforms as Parasolid, leveraging advanced analytics to derive valuable insights and optimize operational efficiencies by 50%

- Managed four features within Siemens NX CAD software. Mentored and guided 3 interns to proficiency in NX software. Resolved 70+ problem reports, contributing to overall enhancement of software functionality

PROJECTS

- **Real-Estate Website**: Designed a responsive website leveraging ReactJS, ExpressJS, CSS and MongoDB. Integrated features for booking house visits, managing wish-lists and robust authentication systems

- **Professional Portfolio Profile**: Developed a professional portfolio website leveraging ReactJS, HTML, CSS, and JavaScript. Seamlessly integrated Node.js and MongoDB for a modern and responsive design

- **Query Word Tool**: Developed a CLI tool using Golang with a streamlined search experience in the NX Improved 40% productivity by allowing users to search specific words and obtain comprehensive results

- **2D Shape-Extrusion and Manipulation**: Engineered an interface using Babylon.js and Vite to draw 2D shapes on a meshed ground, extrude into 3D, and interactively move and edit vertices, with real-time rendering and responsive resizing

- **Performance Analysis Tool**: Programmed a performance analysis automation tool to streamline regression detection, enabling targeted identification and prioritization of critical issues, reduced man hours by 65%

- **Rainbow Signature Scheme (Advancing Security in Multivariate Cryptography)**: Implemented a signature scheme using Python centered on solving a set of random multivariate quadratic systems, resulting in a 20% increase in efficiency for both signature generation and verification processes

- **Marking Scheme based on Performance Time**: Created a Python tool to automate grade calculations based on performance time, resulting in a 45% reduction in manual hours

ACHIEVEMENTS

- Winner at PES-Innovations 2023 at Siemens DISW

- Awarded with Inspire Scholarship — July 2017 - June 2022

- Awarded with Gargi Scholarship — July 2015 - June 2017