### SAURABH MAHAJAN

FRONT-END DEVELOPMENT | BACK-END DEVELOPMENT | DATABASE MANAGEMENT | CLOUD COMPUTING saurabhmahajan854@gmail.com | LinkedIn | Portfolio | GitHub

- A dynamic Full-stack Software Engineer with 2 years of intensive experience, spearheading transformative initiatives within the realm of Cyber Security on multiple platforms. I excel in architecting high-performance applications, driving innovation, and fostering collaborative environments to deliver cutting-edge solutions that prioritize security and efficiency.
- Recognized & honored as the top-ranked holder nationwide in a comprehensive Computer Fundamentals examination C-CAT, showcasing exemplary mastery of fundamental computing principles.

#### **SKILLS & COMPETENCIES**

- REST, HTTP, RDBMS, Microservices, Containerisation, OOP, System Design, Agile, Data Structures & Algorithms
- Java, C#, Python, JavaScript, Typescript, SQL, NoSQL, HTML, & CSS
- Spring Boot, Spring Framework, .NET, Node, Cron, React, Next.js, & Redux
- Git, GitHub, Amazon Web Services (AWS), Jira, MITRE, Docker, CI/CD (Continuous Integration & Continuous Delivery)

#### **PROFESSIONAL EXPERIENCES**

#### Software Engineer, NetSPI, India

July 2023 - Present

- Spearheaded the migration of Breach & Attack Simulation (BAS) Platform from .NET & MS-SQL backend to Spring & PostgreSQL backend, yielding efficient resource management & slashing infrastructure costs by 30%.
- Developed client admin functionality with controlled admin privileges to client users using PostgreSQL joins, views, & complex authorization scope handling in Java with Spring, complemented by its user management UI in React.
- Collaborated with a team of 6 to build various modules of Async Job Framework in Spring, facilitating efficient execution of bulk operations asynchronously with live updates of the job on the UI, resulting in 20% improvement in user engagement.
- Introduced an AWS Lambda-based data importer into a Spring application for MITRE, effectively harnessing the scalability and cost-efficiency of serverless computing, resulting in a 15% enhancement in operational efficiency.
- Integrated AWS S3 in a web application, facilitating storage & management of over 50,000 images & files, alongside implementing an image compression feature cutting image sizes by 60%, enhancing performance and user experience.
- Played a key role in developing a microservices-based architecture utilizing Docker containers, resulting in a 30% improvement in deployment efficiency & a significant increase in overall system scalability.
- Crafted an in-product reporting framework in React facilitating dynamic PDF generation with support for images, tables, and
  other styles, seamlessly integrating Highcharts for dynamic chart generation, and engineered a JavaScript and Web workers
  solution to optimize the PDF downloading by 95% on the background thread.
- Designed & developed a cutting-edge generic file generation framework for generating PDF & CSV files for diverse entities capable of handling 100k+ records with optimal processing time.
- Delivered mentorship to newly joined team members, empowering, & helping them through comprehensive training in product, code, & tech practices & ensuring their effective contribution to the project's advancement.

## Associate Full Stack Engineer, NetSPI, India

May 2022 - June 2023

- Pioneered the integration of Multi-Factor Authentication (MFA) using the Spring Framework with Java, boosting security measures through phone verification & Microsoft Authenticator, & decreasing unauthorized access by 30%.
- Revolutionized a new login flow using React & TypeScript, incorporating MFA, password expiry, & reuse prevention features to elevate security & user experience.
- Led the transformation of Breach & Attack Simulation (BAS) Platform from company-centric to operation-centric approach, & improved security threat detection & mitigation by 25% through enhanced dashboard & optimized the APIs by 20%.
- Implemented the MITRE Software & Group import in BAS by leveraging the STIX models in C# & Java, driving the enhancement & alignment of the product with industry standards.
- Enhanced data filtering & analysis capabilities for TTP Coverages using .NET Core with a 40% increase in speed & accuracy for large-scale data processing.
- Exhibited exceptional adaptability in swiftly transitioning & excelling in multiple cyber security platforms, resulting in a 15% faster organisation advancement through effective collaboration with cross-functional & globally dispersed teams.

# **PROJECTS**

Project 1: Opus – A Corporate Management System - [ Code ]

Nov 2023 - Present

React, Redux, TypeScript, MUI, Java, Spring Boot, MySQL, OpenAPI, SMTP, CI/CD, GitHub Actions, RDS, EC2, & Vercel

Project 2: Acadia – A Learning Management System - [ Live ] [ Code ]

Feb 2024 - Mar 2024

MongoDB, JavaScript, Typescript, Node, Express, React, Next.js, Youtube video, OAuth2, SMTP, Razorpay, & Websocket

Project 3: Portfolio – A Personal Branding Website - [Live] [Code]

Jan 2024 - Feb 2024

React.js, Next.js, Tailwind CSS, TypeScript, & CI/CD with Vercel

Project 4: Emerald Oasis – A Multi-Cuisine Restaurant Management System - [ Code ]

Jan 2022 - Apr 2022

MySQL, Java, Spring, JavaScript, React & Bootstrap

## **EDUCATIONAL QUALIFICATIONS**

Post Graduate Diploma in Advanced Computing - (84.63%)

Apr 2022

Centre for Development of Advanced Computing, India

Bachelor of Engineering- (CGPA - 7.59/10)

Nov 2020