

# Samarth Singh

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## Education

**Arizona State University** | *Masters in Computer Science (GPA 4/4)* **August 2022 - May 2024**

Relevant Coursework: Mobile Computing, Database Management System Implementation, Data Visualization, Database Distributed Systems, Data Mining, Statistical Machine Learning, Information Assurance and Security.

**SRM Institute Of Science And Technology** | *Bachelors in Computer Science* **August 2016 - May 2020**

Relevant Coursework: Data Structures, Web Development, Database Management System, Object Oriented Analysis and Design, Object Oriented Programming.

## Technical Skills

**Programming Languages:** Python, JavaScript, C++, C, Java, COBOL

**Technical Skills:** Web Development, RESTful Web Services, Machine Learning, Data Engineering, Cloud Computing (AWS), Database Management, Data Visualization

**Tools & Frameworks:** React.js, React Native, Node.js, Express, MongoDB, Postgres, Docker, GraphQL, Kubernetes, RESTful API, CI/CD, Jenkins, OpenCV, MySQL, DB2, Kafka, Hadoop, TypeScript, Cassandra, SQL Server 2008, Git

## Experience

**Accenture** | *Software Engineer* | Navi Mumbai, India **January 2021 - June 2022**

- Engineered comprehensive ETL solutions using Informatica, integrating AWS for scalable data processing, achieving a 15% increase in data throughput and reliability.
- Administered and successfully delivered 150+ JIRA tasks, overseeing project milestones and leveraging Jenkins for CI/CD, leading to a 25% reduction in project cycle times and improved efficiency in client issue resolution.
- Developed and automated an AWS S3-based data validation and ingestion pipeline, boosting ETL efficiency by 20% and cutting data processing errors by 30% in cloud environments.
- Implemented Power BI for advanced analytics in AWS-hosted databases, facilitating a 40% improvement in data-driven decision-making efficiency.

**Cognizant** | *Programmer Analyst* | Chennai, India **July 2020 - December 2020**

- Optimized and created 50+ RESTful APIs using Node.js, leading to a notable 30% increase in processing speed across multiple company projects.
- Collaborated with the front-end team to optimize UI/UX for three major internal web applications, leading to a 20% increase in page load speed and a 15% improvement in user satisfaction.

## Projects

**GuardianTeen Mobile Application** | *Android, Node.js, MongoDB* **September 2023 - December 2023**

- Led GuardianTeen Android app development, integrating GPS, geofencing, fall detection, and over-speeding alerts with java/kotlin. Enhanced emergency response by 40%, enabling instant parental alerts with critical location details.
- Architected the backend using Node.js, enhancing data processing and management capabilities with MongoDB, which contributed to efficient handling of real-time data and user interactions.

**Personal Lifestyle Management Application** | *React, Node.js, TypeScript, MongoDB* **May 2023 - July 2023**

- Crafted a comprehensive lifestyle management application using the MERN stack (MongoDB, Express.js, React, Node.js), featuring journaling, calorie tracking, goal setting via a Kanban board, and expense management. Implemented Redux for advanced state management and WebSockets for real-time updates, enhancing user interaction and application responsiveness.
- Incorporated ChatGPT for intelligent user support, enhancing features in journaling, task management, and providing personalized health and financial advice, coupled with JWT for secure authentication.
- Utilized D3.js and Chart.js for data visualization, creating an interactive dashboard to present weekly/monthly user metrics, achieving a 95% initial user satisfaction rate.

**Data Visualization Vast Mini Challenge 1** | *React, JavaScript, D3.js, Node.js* **January 2023 - March 2023**

- Collaborated in a team of four to develop an earthquake damage analysis tool using d3.js, focusing on severity and trustworthiness of data.
- Enhanced decision-making efficiency by 30%, earning 2nd place in a competitive class project for innovative data visualization.

## Activities And Awards

- \* Best Paper Award for “Real-Time Face Liveness Detection using Eye Blinking and Illumination Techniques” at the 8th International Conference on Contemporary Engineering and Technology, 2020.
- \* Presented a paper in International Conference on Internet of Things “An Analysis of Anti-Spoof Mechanisms in Face Liveness Detection”, 2020.