# Samarth Singh

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#### **EDUCATION**

M.S in Computer Science - Arizona State University, Tempe, AZ (GPA 4/4)

August 2022 - May 2024 (expected)

Relevant Coursework: Mobile Computing, Distributed Database Systems, Statistical Machine Learning, Data Mining

#### **B.Tech in Computer Science- SRM Institute of Science and Technology**

July 2016 - April 2020

Relevant Coursework: Database Management, Computer Networks, Operating Systems

### PROFESSIONAL EXPERIENCE

ACCENTURE January 2021 - June 2022

Software Engineer - ETL, SQL, AWS, Jenkins CI/CD, Power BI

- Engineered ETL solutions with Informatica/SQL, boosting throughput by 15%.
- Utilized Jenkins CI/CD to automate ETL, boosting reliability and shortening project cycles by 25%.
- Developed an AWS S3-based pipeline for data validation and ingestion, resulting in a 30% reduction in errors and saving around 15 hours of manual work weekly in cloud operations.
- Implemented Power BI in AWS databases, enhancing decision-making efficiency by 40%.

COGNIZANT July 2020 - December 2020

Programmer Analyst - Android, Kotlin, Javascript, Node.js

- Developed and optimized RESTful APIs using Node.js, improving processing speed by 30%.
- Developed an **Android**-based digital reimbursement system using **Kotlin**, which included an efficient, policy-compliant receipt upload feature. This implementation streamlined processing, resulting in a notable **50%** reduction in turnaround time.
- Implemented **Firebase** Cloud Messaging for timely push notifications, integrating with 10+ third-party services, enhancing app functionality and user engagement.

## **TECHNICAL SKILLS**

- Programming Languages: Python, Javascript, C/C++, Java, Kotlin
- Technologies: Node.js, Docker, Kubernetes, Redis, Kafka, Django, Flask, Databricks, Snowflake, BigQuery
- Development: API Design, Unit Testing, Git/Github, CI/CD
- Databases, Platforms, and OS: MongoDB, MySQL, Postgres, AWS, Azure, Windows, Linux/Unix

### **PROJECTS**

#### Guardian Teen - Android, Node.js, MongoDB

- Led the creation of the GuardianTeen **Android** app, focusing on features like geofencing, fall detection, health check and overspeeding using **Kotlin**, resulting in a 40% boost in emergency responsiveness.
- Engineered the app's backend with Node.js and MongoDB, optimizing real-time data processing and user interaction capabilities.

## Personal Lifestyle Management Application – React, Node.js, MongoDB

- Developed a multifaceted lifestyle management app using the **MERN** stack, integrating features like journaling, task management, calorie tracking, and expense management. Enhanced user engagement and real-time functionality using Redux and WebSockets.
- Incorporated **ChatGPT** for smart user support in task management and personalized advice, ensuring secure interactions with JWT. Leveraged D3.js and Chart.js for dynamic data visualization.

## Weather Prediction - Python, Machine Learning

- Devised a weather prediction system capable of forecasting 37 different conditions, leveraging 14 distinct weather parameters.
- Maintained an 85% accuracy rate during tests involving over 10,000 data instances.

#### **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