HARSHDEEP HARIKESH MISHRA

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SUMMARY

- **3+ years of software engineering experience** building full-stack applications using TypeScript, React, Node.js, and cloud services.
- Delivered end-to-end features, scalable backend APIs, cloud-native solutions, and data pipelines on AWS and GCP.
- Certified as Google Cloud Platform **Associate Cloud Engineer** (link) and Snowflake **SnowPro Core** (link).

PROFESSIONAL EXPERIENCE

Haver AI Inc - Boston, MA, USA | *Software Engineer*   **Feb 2025 - Present**
- Implemented on-demand loading with Redux and decoupling high-latency API calls, reducing user wait times by 100ms.
- Architected a **data lake** in AWS S3 by automating ingestion of 5+ GB of monthly data using AWS Lambda and AWS Eventbridge, fetching insurance claims data from client API and ensuring real-time alerts via AWS SNS for reliability.
- Developed a serverless **REST API backend** with AWS API Gateway and Lambda, enabling 100% on-demand pipeline execution.
- Automated ML workflows with an AWS SageMaker MLOps pipeline, streamlining model deployment and inference execution.
- Developed a React-TypeScript admin dashboard displaying 10+ user statistics from DynamoDB via REST API for profile insights.

Skuad - India | *Software Engineer*   **Dec 2022 - May 2023**
- Executed client **business KPI** calculations on user activity and network performance with PySpark on GCP, accelerating analytics.
- Gathered client requirements and optimized data processing pipelines on AWS Glue and GCP Dataproc ephemeral clusters, reducing cloud costs by 30%.
- Optimized the observability platform with structured logging in GCP Cloud logging, reducing debugging time by 70%.
- Trained 5+ developers on AWS services, improving team proficiency in cloud-based development.

Quantiphi - India | *Software Engineer*   **Jul 2021 - Nov 2022**
- Built a Node.js-based **S3 document retrieval system** with secure REST API access, handling 10K+ file requests monthly.
- Spearheaded creation of a cloud solution on GCP with Cloud Vision API and Apache Airflow for parallel processing of **1M+ PDF documents** and reducing processing time from 28 days to 10 days.
- Reduced claims processing request latency by 500ms with Redis caching for patient data and metadata.
- Enforced 5s rate-limiting on select high-load APIs with Express middleware for preventing overload & maintaining performance.

PROJECTS

Dark Web Cryptocurrency Tracker | *Tor, Python, Selenium, SQS, Neo4j, React, GraphQL, Vis.js*   **| Demo | GitHub**
- Deployed a Node.js & Apollo GraphQL backend for real-time visualization in React & Vis.js, enabling interactive txn tracing.
- Engineered a dark web crawler with Tor & Selenium, extracting Bitcoin addresses from 100K+ sites and streaming them to SQS.
- Designed blockchain transaction scraper, tracing fund movements and mapping 15K+ relationships in Neo4j for pattern analysis.

Multi-Source Live Video Streaming Studio | *React, Node, FFmpeg, Socket.io, WebRTC, TailwindCSS, JavaScript*   **| Demo | GitHub**
- Built Node.js backend with RTMP, FFmpeg, and WebSocket for real-time Twitch streaming, reducing stream setup time by 40%.
- Created a React frontend with WebRTC-based video previews, overlays, and screen sharing, allowing dynamic stream customization with less than 100ms UI updates.

Graph-Based Forex Rate Optimization | *Java, Spring Boot, MySQL, Graphs, Log4j, Docker, AWS*   **| Demo | GitHub**
- Engineered a Spring Boot app for real-time multi-currency conversion, supporting 12+ currencies, deployed with Docker on EC2.
- Implemented a shortest path Graph-based algorithm, optimizing exchange routes for 100% improved user profitability.
- Developed RESTful APIs with Swagger UI, ensuring response times under 2s for seamless API access.

EDUCATION

University at Buffalo, The State University of New York   **Aug 2023 - Jan 2025**
Master of Science, Computer Science and Engineering   **GPA: 3.7/4.0**
Relevant Coursework: Algorithms, Database Systems, OS, ML/AI, Software Engineering, Data Intensive Computing

University of Mumbai   **Aug 2017 - May 2021**
Bachelor of Engineering, Computer Engineering   **GPA: 9.15/10**
- **Winner,** Smart India Hackathon (SIH) 2019 – A national-level hackathon held at NIT Trichy, competing against **50+** teams.

TECHNICAL SKILLS

- **Programming**   : Python, JavaScript, SQL, C, C++, Java, TypeScript, HTML/CSS
- **Frameworks**   : Node.js, React.js, Flask, Spark, Spring Boot, Express.js
- **Data & Storage** : MySQL, Hive, MongoDB, Redis, PostgreSQL
- **Cloud**   : AWS (Lambda, S3, EC2, SQS, Glue, API Gateway, Sagemaker), GCP (BigQuery, Dataproc, Composer)
- **Tools**   : Git, Docker, Linux, terraform, Kafka, Machine Learning, CI/CD, Agile