# Onkar Patole

✉ opatole@binghamton.edu | 📞 (607)-296-8389 | 🔗 onkarpatole.com | in onkarpatole | ⌨ OnkarPatole28

## Education

| | |
|---|---|
| **Binghamton University, State University of New York** | Aug 2023 – May 2025 |
| *MS in Computer Science* | |
| **Savitribai Phule Pune University** | Aug 2017 – June 2021 |
| *Bachelor of Engineering in Electronics and Telecommunication* | |

## TECHNICAL SKILLS

- **Programming Languages:** Python, Java, Spark, Scala, C
- **Tools and Technology:** Docker, Kubernetes, Terraform, Git/Github, Kafka, Power BI, Microsoft Excel, Airflow
- **Web Application Tools:** JavaScript, HTML, CSS, Django, React.js, TypeScript, Node.js, Express.js
- **Databases:** MySQL, MongoDB, DynamoDB
- **Cloud:** AWS - IAM, EMR, EC2, Redshift, Lambda, Kinesis, Glue, EKS, S3, DMS, QuickSight, CloudFormation

## Work Experience

**Cloud Site Reliability Engineer Intern** — June 2024 – Present
*Michigan Health Information Network (MiHIN)* — *Michigan, USA*

- Working with **Development** and **DevOps** teams to deploy cloud solutions using **Terraform**, **Kubernetes**, **Docker** and **Serverless Framework**, improving system reliability and reducing deployment times by 25%
- Optimizing cloud infrastructure with **Infrastructure-as-Code (IaC)** practices, ensuring scalability, high availability, fault tolerance, and streamlining maintenance and troubleshooting of cloud systems
- Contributing to the development of **CloudFormation stacks**, automated scripts, and tools for managing **cloud infrastructure**, while implementing **security protocols**, reducing security incidents by 30%

**Software Engineer** — Jan 2022 – August 2023
*LTIMindtree* — *Pune, India*

- Built and executed an **ETL** pipeline with a team of developers on **AWS** using **Lambda**, **Glue**, and **S3**, transforming and modeling large datasets, reducing processing time by 35%
- Led the design and execution of a 100+ terabyte **Oracle-to-MySQL** database migration using **AWS DMS**, improving query performance by 40% while ensuring zero data loss and minimal downtime
- Integrated unstructured historical on-premise data into **Redshift**, implemented data cleansing processes that enhanced query performance by 30% and reduced storage costs by 25%

**Associate Consultant** — Aug 2021 – Nov 2021
*Bristlecone* — *California, USA*

- Collaborated with **Data Analyst** team to develop 15+ interactive dashboards and visualizations using **Power BI**; improved datadriven decision-making and reporting processes
- Leveraged **advanced Excel** techniques such as **data modeling**, **macros**, and **conditional formatting** to enhance data accuracy and streamline reporting workflows

**Software Engineer Intern** — March 2021 – Aug 2021
*Zenture IT Solutions* — *Pune, India*

- Designed and developed secure, scalable netbanking applications using the **Django framework**, achieving a 30% increase in system stability and a 25% reduction in server load through performance optimization
- Implemented **REST APIs** in **microservices** using **Django REST Framework** (DRF)

## Projects

**MERN Finance Dashboard**

- Developed an interactive finance dashboard with **TypeScript**, **Redux Toolkit**, **Material UI**, and **Recharts**
- Designed a **back-end** with **Node.js**, **Express.js**, and **MongoDB**, achieving a 15% increase in **API performance**

**TravelStream Insights**

- Executed a real-time streaming data engineering project using **Kafka** for data ingestion and **Spark** for distributed processing
- Orchestrated deployment of Dockerized Kafka and Spark clusters, integrated with **Amazon S3** for scalable data storage, **AWS Lambda**, and **Quicksight** for dashboard creation, enhancing data visualization and analysis

## Certifications

- AWS Certified Cloud Practitioner (CLF-C02)
- AWS Certified Solutions Architect - Associate (SAA-C03)
- AWS Certified Data Engineer - Associate (DEA-C01)