Tarun Chawla

www.tarunchawla.dev LinkedIn GitHub

Twitter

#### SUMMARY

Experienced Backend Engineer with 4 years of expertise in Python, SQL, and microservices architecture. Strong background in implementing LLM-powered applications and data retrieval systems. Proven track record in optimizing system performance and contributing to open-source projects.

#### WORK EXPERIENCE

QRev AI March 2024 – Present

 $Founding\ Software\ Engineer$ 

Remote

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- Engineered a SaaS product using **React**, **TypeScript**, and **NextJS** with advanced animations, enhancing user engagement and achieving **20%** faster load times.
- Developed and maintained APIs using **NodeJS** and **Python**, leveraging LLMs to automate marketing workflows, resulting in a **40% reduction in manual tasks**.
- Implemented secure deployment pipelines with AWS, Docker, and CI/CD, ensuring 99.99% uptime and supporting scalable infrastructure for high-traffic applications.
- Led troubleshooting and optimization efforts, improving system performance by 25% through proactive identification of performance bottlenecks and enhanced error logging.

MindsDB Jun 2023 – March 2024

OSS Maintainer

Part-time, Remote

- Developed and tested **LLM integrations** with Slack, and WhatsApp, implementing robust **Python** backends and **SQL** interfaces.
- Led comprehensive integration testing efforts across multiple database handlers and AI providers, ensuring reliability and compatibility of new features.
- Provided technical support and troubleshooting guidance to community members in Slack, resolving integration issues and improving documentation based on user feedback.

BermTec, Inc August 2023 – December 2023

DevOps Engineer

New York, NY

- Architected and deployed a **multi-cloud Kubernetes infrastructure**, reducing operational costs by **30**% and improving system resiliency with auto-scaling capabilities.
- Automated cloud infrastructure with **Terraform** and **CI/CD** pipelines, resulting in a **50%** reduction in deployment times and improved overall system security.
- Conducted performance optimizations for high-load systems, resulting in a **20% improvement** in response times during peak traffic periods.

Truvisory July 2020 – July 2021

Intern, Software Developer

Mumbai, India

- Developed and deployed 5+ web applications using ReactJS and Angular, reducing bounce rates by 20% and improving user engagement.
- Led integration of agile development practices, facilitating a 25% improvement in feature delivery speed and improving overall team efficiency.

#### Publications

Chawla, T. and Hande, R. (2021). "Equity Portfolio Generation and Optimization Using Machine Learning." Journal of Advanced Research in Computer Science, 9(1), 99-106. DOI: 10.48175/IJARSCT-3064  $\operatorname{etcd}$  -  $\operatorname{Raft}$  —  $\operatorname{GitHub}$ 

Go, GitHub Actions, Tracing, Distributed Systems

• Enhanced the Raft consensus algorithm implementation by developing end-to-end testing using ARM64 runners in GitHub Actions, improving test coverage by 35% and reducing deployment failures by 25%.

### MindsDB - Open Source — GitHub

2022

Python, SQL, OpenAI, Microservices

• Integrated Slack API with MindsDB, enabling seamless automation of user queries and OpenAI prompt responses, reducing response time from minutes to **seconds**.

# **EDUCATION**

# Stevens Institute of Technology

Aug. 2021 - May 2023

Master of Science in Information Systems - GPA: 3.9/4

New Jersey, USA

# University of Mumbai

Aug. 2017 - May 2021

Bachelor of Engineering in Computer Engineering

 $Mumbai,\ India$ 

# AWARDS & HONORS

## Merit-Based Scholarship — Stevens Institute of Technology

2021

Received \$14,000 scholarship for outstanding academic performance and research potential in graduate studies.

### CNCF KubeCon North America Scholarship

2022, 2023

Recognized for contributions to cloud-native technologies and open-source projects.

### CERTIFICATIONS

# CKA: Certified Kubernetes Administrator

2023

Container Orchestration, Kubernetes Control Plane Components (Scheduler, kube API Server, etc.), kubectl

### AWS Certified Developer – Associate

2023

Compute(EC2, ECS, EKS), Serverless(AWS Lambda), Database(S3, DynamoDB), IaC(AWS CloudFormation), ALB

# Microsoft Certified: Azure Administrator Associate

2023

Azure Virtual Machines, Entra ID(Active Directory), Storage Services, Azure Monitor, Security

## TECHNICAL SKILLS

Languages: Python, SQL, Go, JavaScript, TypeScript, Java

Backend & Databases: Flask, PostgreSQL, MongoDB, Redis, REST APIs, Microservices

Cloud & DevOps: AWS (EC2, Lambda), Docker, GitHub Actions

AI/ML: LLMs, Transformers, RAG Systems, Text-to-SQL