

AKSHATH SK

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Education

University of Illinois at Urbana Champaign

August 2022 - December 2023

Master's Degree, Computer Science; **GPA: 4.0/4.0**

Champaign, Illinois, USA

Graduate Teaching Assistant: Software Engineering (CS 427)

BMS College of Engineering (Visvesvaraya Technological Univ.)

August 2015 – August 2019

Bachelor's Degree, Computer Science; **GPA: 9.55/10.00**

Bangalore, Karnataka, India

Technical Skills

Languages: Java, JavaScript, ReactJS, NodeJs, SQL

Databases: Azure SQL, IBM DB2, MongoDB, CosmosDB, Redis, Neo4j

Frameworks: Vertx, Spring Boot, Activiti workflow, Kafka, Junit, Mockito

Others: Azure Cloud, Python, GIT, Shell Scripting, C++

Experience

Full Stack Intern

June 2023 – Aug 2023

FedEx

Memphis, Tennessee, USA

- Independently spearheaded the redesign of the **Automated Dispatch Sectorization**, overseeing the project from initial analysis and **Balsamiq** design to front-end and back-end implementation, integration with external systems, rigorous testing, and achieving production readiness for the first MVP
- Worked as a part of the core **Express Shipment Service** Team utilizing **Angular** and **Java SpringBoot** for development tasks
- Gaining insights into the logistics and shipment industry while developing valuable technical skills

Research Assistant

January 2023 – May 2023

Collaborative Project between IBM Research and UIUC

Champaign, Illinois, USA

- Led a 4-member graduate team** in developing REST-GPT for automated test suite generation utilizing **ChatGPT** and implemented microservice fuzzing under the supervision of Dr. Darko Marinov and Dr. Reyhaneh Jabbarvand, achieving prime path coverage for microservice-to-microservice interactions.
- Surpassed Microsoft's RESTler**, Evomaster Blackbox, RESTtest, RESTtestgen, and SchemaThesis by achieving approximately 10% higher line, branch, and method coverage across 20 benchmark projects.

Software Engineer 3

June 2021 – July 2022

Walmart

Bangalore, India

- Contributed to the development of **Cloud Powered Checkouts** for Walmart & Sam's Club stores
- Proficient in utilizing **Azure Cloud, Kubernetes, and Docker** for implementing cloud technologies
- Designed and developed a hierarchical configuration tool using reactive **Vertx Java, Azure SQL, Redis, Kafka, and ReactJs**
- Successfully integrated the product with multiple clients and efficiently handled dynamic change requests in an agile environment
- "Walmart Bravo Award"** for timely delivery of critical and complex features in March 2022
- Awarded **"Associate of the Month"** across Transactional Systems at Walmart in February 2022

Senior Software Engineer - Consultant at Morgan Stanley

June 2019 – June 2021

Accolite Digital

Bangalore, India

- Served as a Technical Consultant for Treasury Tech at Morgan Stanley, overseeing a client project, developing a real-time **Java** dashboard for faster report generation, and leading a seamless **migration of IBM DB2 OLTP Database** from v9.5 to v11.2.
- Managed integration with critical downstream systems like Trading and Unsecured Funding, and devised a widely-adopted generic **annotation-based asynchronous library**
- Implemented generic **DevOps** practices for streamlined deployment of new changes in production environments
- Engaged comprehensively in the **software development lifecycle**, from requirements gathering and design to implementation, testing, deployment, and maintenance.

Software Engineer Intern - Consultant at FedEx

January 2019 – May 2019

Accolite Digital

Bangalore, India

- Developed the "Random Drug Tests" project for FedEx pilots using the Java Spring Boot framework
- Created a generic microservice responsible for handling email-sending failures

Projects

Configuration Tests on Apache Skywalking | Java, MySQL, Junit, Mockito, Python

- Reproducing an OSDI conference paper "Testing Configuration Changes in Context to Prevent Production Failures" (Awarded SIGSOFT Distinguished Paper) with an open source project - **Apache Skywalking**.

tutorly.live | React, Java

- Orchestrated development of tutorly.live which ranked in the top 10% in over 60 submissions and was selected for the **App Competition** at UIUC in December 2022