ULLAS BASAVAPATNA CHANDRASHEKAR

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EDUCATION

Master of Science in Computer Science, **George Washington University** **May 2026**
Bachelor of Engineering in Electronics and Communication Engineering, **Visvesvaraya Technological University** **July 2022**

EXPERIENCE

Infosys Ltd – *Software Engineer* *Bengaluru, India* | Aug 2022 - Jun 2024

- Designed and deployed scalable **Java-based microservices** for region-specific rollout across 6 European markets (Liberty Global); **accelerated feature delivery by 2 weeks/release**
- Developed **RESTful backend tools** and data validation scripts to **streamline QA for ~30K** simulated users per test bed, reducing manual test effort by over **60 hours per sprint**
- Refactored configuration and orchestration scripts across **22+ services**; improved deployment consistency, minimizing production errors in **high-traffic environments (~1.2M weekly users)**
- Worked in Linux-based environments, managing **shell scripts** and release jobs via **CI/CD pipelines**
- Collaborated with cross-functional teams on **system design** and automation, contributing to **scalable backend** architecture and developer productivity tools

Transo – *Software Intern* *Bengaluru, India* | Aug 2021 - Oct 2021

- Built a real-time **dashboard** for logistics tracking **5,000+ shipments/day using JavaScript, REST APIs**, and modern UI frameworks
- Developed a **predictive ML model** (accuracy: 87%) for fleet efficiency analysis, helping reduce annual **CO_2 output by 200+ metric tons**

TECHNICAL SKILLS

- Programming Languages: Java, Python, C++, C, Ruby
- Frontend Development: NextJS, ReactJS, HTML, CSS, Angular
- Backend & Databases: SpringBoot, PostgreSQL, MySQL, Rails, MongoDB, NodeJS
- Cloud & DevOps: AWS, GitHub, Bitbucket, Linux, Bash
- Other: Data Structures & Algorithms, Object-Oriented Programming (OOP), System Design

PROJECTS

Semantic Drift - *NLP, Semantic Drift Detection, Contextual Embeddings, HDBSCAN, Temporal Text Analysis*

- Developing an NLP pipeline to **detect semantic drift** and emerging internet slang across Reddit communities (GenZ, Teenagers, AskReddit) using **contextual embeddings** (Sentence Transformer) and **HDBSCAN clustering** to identify evolving word meanings over time.
- Building a language model drift evaluation framework combining breakout trend analysis, **semantic shift detection**, and **masked language modeling** (RoBERTa) to estimate when LLMs require retraining due to distribution shift in slang and online language.

WeCureIT – *SpringBoot, NextJS, PostgreSQL, Firebase, AWS*

- Engineered a **full-stack clinic management platform** supporting 3 user roles (patients, doctors, admins), **dynamic appointment scheduling**, and facility–specialty mapping, reducing **manual scheduling conflicts by ~70%**. Implemented **rule-driven availability logic** (hourly breaks, lunch intervals, single-facility/day constraint) and optimized REST APIs, enabling concurrent booking for **100+ simulated users** with sub-200ms average response time

MediMate – *Large Language Model, Natural Language Processing, Semantic Retrieval*

- Built an **AI-powered** clinical decision support system trained on **30K+ PubMed articles** (titles + abstracts), enabling symptom-based diagnostic suggestions using **semantic retrieval** and **LLM reasoning**. Implemented **embedding** generation and similarity search with ChromaDB, reducing information lookup time for **clinicians by ~40%** while improving preliminary **diagnostic accuracy by 10–15%**

Driftline – *Distributed Systems, Observability, Python, OpenTelemetry*

- Built a behavioral drift detection platform over **distributed traces, detecting dependency and p95 latency** regressions (>2×) within 1–2 minutes using execution-graph diffing and baseline snapshots, **processing 1,000+ spans/min with <100 ms** ingestion latency and reducing simulated incident MTTR by ~50%.