Akash Maji

+91-9131697371 | akashmaji946@gmail.com | akashmaji@iisc.ac.in
Website:// akashmaji.me   Github:// akashmaji946   LinkedIn:// akashmaji946

EDUCATION

INDIAN INSTITUTE OF SCIENCE
M.Tech in CSE | 2024-26
Cum. GPA: 8.20 / 10.0

RGPV UNIVERSITY, BHOPAL
B.Tech in CSE | 2017-21
Cum. GPA: 9.39 / 10.0
Distinction (Hons.) with Silver Medal

KRISHNA PUBLIC SCHOOL
HSC | PCM | 2015-17
Class XII Boards: 95.4 / 100.0

DAFFODIL PUBLIC SCHOOL
Matriculation | 2005-15
Class X Boards: 94.5 / 100.0

COURSEWORK

UNDERGRADUATE
Operating Systems | Databases |
Computer Networks | Computer
Organization | Digital Logic Design |
Discrete Maths | Compiler Design |
Theory of Computation | Linux

GRADUATE
Probability and Statistics | Database
Systems | Computer Architecture |
Machine Learning | Scalable Data Science |
Cryptography | Distributed Systems |
Graphics And Visualization | Computer
Systems Security | Parallel Programming

ACHIEVEMENTS

2019	RGPV Chancellor Award
2021	RGPV Silver Medal
2024	GATE CS & AIR 026
2023	GATE CS & AIR 608
2024	GATE DA & AIR 648

SKILLS

PROGRAMMING
Industry experience with:
Java • JavaScript • Spring Boot •SQL
Eclipse/STS • OracleDB • JIRA •Git
Proficient with:
Java • C/C++ • Python • Linux • CUDA •
OpenMP/MPI • Spark • OpenGL

SOFT SKILLS
Native Proficiency:
English • Hindi • Bengali

EXPERIENCE

TATA CONSULTANCY SERVICES | Systems Engineer
Indore | Aug 2021 – May 2024 | Full Time
Worked as a System Engineer in TCS (Digital) as full-stack developer under a
real-estate project with Verizon. Received 3 Star of Month awards for managing the
team and contributing to projects, development and production support.

CERTIFICATIONS

ORACLE CERTIFIED ASSOCIATE JAVA PROGRAMMER | Cert
1Z0-808| Feb 2019 | Bhopal, IN
Certified as a Java Programmer from Oracle through online proctored exam

MICROSOFT CERTIFIED AZURE FUNDAMENTALS | Cert
AZ-900 | July 2020 | Online
Recognized as an entry-level cloud programmer from Microsoft.

PROJECTS

GO-REDIS | GitHub · Docs · Releases
Developed a lightweight, multi-threaded, Redis-compatible in-memory
key-value store server in Go, supporting core Redis commands and data
structures (Strings, Lists, Sets, Hashes, Sorted Sets), full RESP protocol
compatibility, persistence via AOF and RDB, pub/sub messaging,
authentication, key expiration with TTL, atomic transactions (MULTI/EXEC),
background persistence operations (BGSAVE, BGREWRITEAOF), and
configurable memory management with LRU/Random eviction policies.
Tools Used
Go • Redis-CLI • Git

VM-DIFFING-TOOL | GitHub · Docs · Releases
Developed a powerful web/CLI tool for analyzing and comparing VM disk
images. Supports image browsing, side-by-side file, directory and block
comparisons, image conversion, VM launch utilities, and PDF reports.
Tools Used
Python (Flask) • C++ (pybind11) • libguestfs • Docker • SQLite

MEDICAL VOLUME RENDERER | GitHub · Releases
Implemented an OpenGL-based 3D volume renderer with a PyQt6. Capable
of loading medical/scientific volumes (NIfTI, DICOM, VTK) and performing
GPU-accelerated volume rendering, slice visualization, isosurface rendering,
and interactive transfer function editing.
Tools Used
C++ • OpenGL • Python • PyQt6 • pybind11 • VTK • DCM• Docker • NIfTI

MARKET MICROSERVICE | PODS Course Project | GitHub
Implemented 3 microservices (account-service, marketplace-service,
wallet-service) using dockerized akka-cluster where concurrent RESTful
requests are made and served using CLI, ensuring consistency.
Tools Used
Java21 • IntelliJ • Git • SpringBoot3• Akka library • Docker • Kubernetes

DUCKDB | DBMS Course Project | GitHub
Implemented two operators, 'Join' and 'GroupJoin' in the open-source
DuckDB codebase, with 'Join' being simple nested loop join, and 'GroupJoin'
being used when we have a any 'Join' followed by 'Group By'.
Tools Used
C++ • CMake • Git • SQL • VSCode• QtCreator