Debasish Biswas

debasishbsws.abc@gmail.com +91 6295 887 442, India Linkdin (@debasishbsws)

GitHub (@debasishbsws)

Twitter (@debasishbsws)

EDUCATION

Master's of Computer Application (MCA), NIT Jamshedpur

CGPA: 8.0 **2021- Present**

Bachelor of Science in Computer Science (B.Sc. Honours), Siliguri College (NBU)

CGPA: 8.7 2018-21

RESEARCH WORK:

Fidelity and Entanglement of Random Bipartite Pure States: Insights and Applications <u>Phttps://arxiv.org/abs/2308.01714</u>

- Observation of non-uniform distributions and upper bounds based on measuring quantum states' entanglement
- Revealed quantum random number generator potential. Consistent entanglement-fidelity relationship across dimensions.

OpenSource EXPERIENCE

Google Summer of Code 2023

May'23 - Aug'23

Knative under CNCF

Summerofcode.withgoogle.com/programs/2023/projects/BHsUqzLn

[JAVA, Vert.x, Kubernetes, Apache Kafka, Bash Scripting, GoLang]

- Implement Knative Kafka Broker data-plane communication with the Apache Kafka client and Vert.x Kafka client library.
- Develop the solution using **Java 20** and leverage its new features, specifically **Virtual Threads (Loom)**, for efficient and concurrent communication with the **Apache Kafka cluster**. That can lead to increasing the performance of the system.
- Collaborate with a team of developers to deliver high-quality code contributions.

The/Algorithms&

• Contributor and Maintainer of the <u>IAVA repository of The/Algorithms</u> project that has more than 50k+ \frac{1}{2} GitHub.

PROJECTS

Question Book [Express]S, MySQL, TypeScript, GitHub-Actions]

github.com/debasishbsws/question-book

- Designed and developed a high-performance Node.js Backend Rest API, enabling seamless access to University information and Question Papers stored in a public GitHub repository.
- Implementing Continuous Integration to automatically update the database for every Pull Request that adds new
 question papers to the repository.
- I automated the Build and Testing of the code and also the Docker image creation process, ensuring smooth integration.

Apache Kafka OAM APP [Shell Script, Docker, Kubernetes, YAML]

- Leveraged OAM (Open Application Model) to deploy Apache Kafka on Kubernetes, enabling a highly abstract and modular approach to application deployment.
- Achieved more streamlined and manageable Kafka deployment with greater flexibility and ease of iteration and scaling by abstracting away the underlying infrastructure complexities.
- $\bullet \quad \text{Featured in the NAPTIVE catalog for easy access and adoption in the NAPTIVE cloud} \\$

SKILLS

- Programming Language: Java (proficient), GoLang, JavaScript, TypeScrip, Bash script, YAML
- Tools: Git (VCS), Docker, Kubernetes, Knative | Database: MySQL, MongoDB
- OS: Linux (Ubuntu), Windows | IT Constructs: OOP, DBMS

CERTIFICATIONS and BADGES

Ø Deploy to Kubernetes in Google Cloud - Google Cloud

Ø Deploy and Manage Cloud Environments with Google

Cloud - Google Cloud

EXTRACURRICULAR

Photography: A landscape photographer by passion. Instagram/@debasishbsws. Member of Phocus (NITJSR).

Music: A guitarist, Founded a local band with fellow musicians and had a <u>YouTube Channel</u> with 13K+ subscribers.