



# Shusmoy Chowdhury


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 Shusmoy108

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## EDUCATION

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### Missouri State University

*Master's of Science in Computer Science*

*Springfield, Missouri*

January 2022 - December 2023

## SKILLS

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**Languages:** Java, Python, JavaScript/TypeScript, C/C++, C#, Dart, Scala, HTML/CSS,  $\text{\LaTeX}$

**Framework:** Nodejs, React js, ASP.NET, Android, Django, Flutter, .Net, Spring MVC, JDBC, Spring Boot, Apache Spark, Apache Tomcat

**Database:** Oracle, MySQL, MongoDB, Firebase

**Dev Ops :** CI/CD Pipeline (Jenkins, Bitbucket, Codepipeline), EC2, Route 53, ACM, WAF, S3, Cloudfront, Code deploy, Elastic Beanstalk.

## EXPERIENCE

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### Digital Monitoring Product

*Enterprise Software Engineer*

*January 2024 - Present*

*Springfield, Missouri*

- Working in a large Java Based Application named Entre widely used in federal and state organizations for communication with their panels for maintaining security.
- Working in a large Java Based Automation Application named SCS-VR widely used in banks to communicate with central stations to take necessary steps during fire and burglary alarms.
- Working with different banks and financial institutions like Bank of America, Capital One, Arvest Bank, and JPMorgan Chase & Co to enhance their security with more than 6000 panels.
- Designs, writes, maintains, tests, and debugs software that is modular, maintainable, and easy to understand.

### Girmairi LLC

*Software Engineer(Lead)*

*September 2021 - January 2024*

*Denver, Colorado*

- Led the development team of 10+ members, providing guidance and direction to deliver most of the products successfully before the deadline.
- Working as a seasoned full-stack developer by the company to architect and develop cutting-edge software solutions for web and mobile applications with Java, Javascript, and React Native.
- Spearheaded the design and implementation of an AWS streamlined DevOps operation(Codepipeline, Codebuild, Codedeploy, Lambda, ECS, EC2, S3, IAM, RDS), deployed mobile application in google playstore and appstore, enhancing automation for the entire development team and increasing work efficiency by 70%.
- Enhanced product quality by 85% with employing Google Analytics, Google ReCAPTCHA, CHATGPT, ZOHO and advanced SEO strategies.

### Missouri State University

*Research Assistant*

*January 2022 - Present*

*Springfield Missouri*

- Courses Taught: Introduction to C++ Programming, Data Structure, Computational Thinking, Operating Systems.
- Demonstrated expertise by consistently evaluating examination papers, facilitating laboratory sessions, assessing projects and orchestrating weekly programming workshops.
- Orchestrated the mentor-ship of four senior student groups, providing invaluable assistance in project planning, database design, and delivering constructive feedback for empowering students to achieve outstanding project outcomes and receive accolades from industry professionals.
- Led the ROSE Grant 2023 program, enlightening ten high school teachers about the security vulnerabilities linked to IoT devices.

- Recipient of the Prestigious Outstanding Graduate Research Assistant Award at Missouri State University, in recognition of outstanding research contributions, surpassing peers in a cohort of 100+ graduate Assistants.

## Global Brand Pvt Ltd

1 June 2021 - 1 September 2021

Software Engineer(Contract)

Dhaka, Bangladesh

- Organized the development of the company's mobile application with react-native, ensuring its 100% successful implementation and functionality in both iOS and android.
- Developed and launched the company's one of the most comprehensive mobile applications for ecommerce, focusing on computer accessories, showcasing technical expertise and innovation.
- Successfully orchestrated the application's launch on both Google Play Store and iOS App Store, ensuring 100% smooth rollout process.

## BigGO Limited

5 April 2018 - 6 December 2018

Full Stack Developer

Dhaka, Bangladesh

- Successfully executed four projects, leveraging Node.js for server-side/backend operations and employing React.js as the frontend technology.
- Successfully managed the DevOps and deployment processes for 100% automation on the organization's server infrastructure.

## PROJECTS

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**Evolutionary DC Selection Policy:** Designed novel **Machine Learning** based data center(DC) selection policies in cloud-environment with **Java** which can outperform the existing DC selection policies and reduce the response time and data-processing time by 70% compared to the existing selection policies.

**Movie Recommendation System with Clustering Algorithm:** Built a movie recommendation system using **Apache Spark** and the **MovieLens dataset**, employing clustering algorithms like **K-Means, GMM, and LDA** to suggest users approximately 80% similar movies based on users viewing history.

**Content Suggestion with Topic Modeling:** Created a web-application with **Python** where user will be engaged to read blogs and continuously get suggestion based on the blogs user is reading using **BERT, LDA and LSA** and the suggestion system performs 70% better than other machine learning techniques.

## PUBLICATION

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S. Chowdhury and A. Katangur, "Optimization of Datacenter Selection Policy in Cloud Computing using Differential Evolution Algorithm," 2023 IEEE Cloud Summit, Baltimore, MD, USA, 2023, pp. 33-40, doi: 10.1109/CloudSummit57601.2023.00012.

S. Chowdhury and A. Katangur, "Optimal Datacenter Selection for Cloud Services Using Swarm Intelligence," 2023 26th International Conference on Computer Supported Cooperative Work in Design (CSCWD), Rio de Janeiro, Brazil, 2023, pp. 1366-1371, doi: 10.1109/CSCWD57460.2023.10152594.

S. Chowdhury, A. Katangur, A. Sheta, N. R. Psayadala and S. Liu, "Genetic Algorithm Based Service Broker Policy to find Optimal Datacenters in Cloud Services," 2023 8th International Conference on Cloud Computing and Big Data Analytics (ICCCBDA), Chengdu, China, 2023, pp. 270-278, doi: 10.1109/ICCCBDA56900.2023.10154791.

S. Chowdhury and A. Katangur, "Threshold Based Load Balancing Algorithm in Cloud Computing," 2022 IEEE International Conference on Joint Cloud Computing (JCC), Fremont, CA, USA, 2022, pp. 23-28, doi: 10.1109/JCC56315.2022.00011.

Alam, M. J., Chowdhury, T., Hossain, S., Chowdhury, S., & Das, T. (2021). Child tracking and hidden activities observation system through mobile app. Indonesian Journal of Electrical Engineering and Computer Science, 22(3), 1659-1666.

Alam, M. J., Sarma, D., Chakma, R. J., Mynoddin, M., Chowdhury, S., Raihan, J., & Hossain, S. (2021, August). A Smart Security Solution to Prevent any Mischief with the Vehicles. In 2021 IEEE Region 10 Symposium (TENSYP) (pp. 1-5). IEEE.

## AWARDS

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### **Distinguished Thesis Award**

*Missouri State University*

*Springfield, Missouri*

April, 2025

### **Outstanding Graduate Assistant Award**

*Missouri State University*

*Springfield, Missouri*

April, 2023

## REFERENCES

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### **Dr. Ajay Katangur**

*Professor and Department Head in Computer Science Department*

Email: [AjayKatangur@MissouriState.Edu](mailto:AjayKatangur@MissouriState.Edu)

*Missouri State University*

Springfield, Missouri

### **Dr. Siming Liu**

*Assistant Professor in Computer Science Department*

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*Missouri State University*

Springfield, Missouri

### **Dr. Alaa Sheta**

*Professor in Computer Science Department*

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*Southern Connecticut State University*

New Haven, Connecticut