1. Personal Information

- **Name**: Mr. Akshay Madhukarrao Fajge

- **Position**: Assistant Professor

- **Department**: Information Technology

- **Contact Information**: amfajge@sggs.ac.in, MM Lab (Information Technology Department).

2. Educational Background

- **Degrees**:

  - **PhD** IIT Patna *(Computer Science and Engineering – Blockchain technology)*, <u>Pursuing</u>

  - **MTech** SRTMU *(Computer Science and Engineering – Computer Networks and Information Security)*, 2014

  - **BE** RTMNU *(Computer Engineering)*, 2011

3. Research Interests

- **Areas of Expertise**: Blockchain Technology, Information Security, Code Optimization, Formal Methods

4. Teaching Experience

- **Courses Taught**: TOC, Python Programming, Java Programming, Principles of Programming Languages, Blockchain Technology.

- **Course Development**: Python Programming, Blockchain Technology.

5. Publications and Presentations

- **Book chapters**:

  - Neeraj Kumar Singh, Akshay M. Fajge, Raju Halder, and Md. Imran Alam. Formal Verification and Code Generation for Solidity Smart Contracts. In R. Pandey, S. Goundar, S. Fatima (Eds.), Distributed Computing to Blockchain: Architecture, Technology, and Applications, Elsevier Ed., 2022.

  - Raju Halder, Md. Imran Alama, Akshay M. Fajge, Neeraj Kumar Singh, and Agostino Cortesi. Analyzing Information Flow in Solidity Smart Contracts. In

R. Pandey, S. Goundar, S. Fatima (Eds.), Distributed Computing to Blockchain: Architecture, Technology, and Applications, Elsevier Ed., 2022.

- Fajge A. M., Hatkar S. S., Effect of Quantum Computing on Cryptographic Techniques. Proceedings of the ACC-2014 Workshop on Computing and Communications, McGraw-Hill Education Professional, ISBN-13: 978-93-392-1784-6; ISBN-10: 93-392-1784-5, RSET, Cochi, AUG 2014.

- **Conference Papers**:

  - Akshay M. Fajge, Siddharth Thakur, Rahul Kumar, and Raju Halder. An Automated Framework for Migrating Java Applications to Ethereum Solidity Applications. Proc. of the 3rd International Conference on Blockchain Research & Applications for Innovative Networks and Services (BRAINS '21), Pages 1-3. Paris, France, 27-30 Sept 2021. IEEE Press.

  - Akshay M. Fajge, Subhasish Goswami, Arpit Srivastava and Raju Halder. Wait or Reset Gas Price?: A Machine Learning-based Prediction Model for Ethereum Transactions' Waiting Time. Proc. of the 20th IEEE International Conference on Trust, Security and Privacy in Computing and Communications (IEEE TrustCom '21), Pages 1153-1160. Shenyang, China, 18-20 Aug 2021. IEEE Press.

  - Fajge A. M., Hatkar S. S., A novel approach for signing multiple messages: Hash-based signature. Proc. of the 4th International Conference on SECICT, JNU Delhi, FEB 2014.

6. Awards and Honors

- **Fellowships**: Visvesvaraya PhD Fellowship

7. Professional Experience

- **Administrative Roles**:

  - Departmental Training and Placement Coordinator at SGGSIE&T, Since OCT 2023

  - Departmental Examination Coordination committee at COEP (currently known as COEP Technical University), July 17 – July 18

9. Professional Memberships

- **Associations**: IEEE

10. Miscellaneous

- **Languages**: English

- **Skills:** Solidity, Core Java, Python Programming, Event-B, SQL, Selenium, Kivy, Ethereum Platform, Bitcoin Technology

- **Personal Interests**: Problem Solving, Playing Chess