

Technology Innovation Institute (TII), Abu Dhabi

□ (+971) 505077924 | Majith.suresh@tii.ae | Mayww.ajithsuresh.github.io | Majithsuresh | Majith\_Suresh92 | Agith Suresh92 | Agith Suresh92 | Majith\_Suresh92 | Majith\_Suresh92 | Majith\_Suresh93 | Majith\_Suresh94 | Majith\_Suresh95 | Majith\_Suresh96 | Majith\_Suresh96 | Majith\_Suresh96 | Majith\_Suresh97 | Majith\_Suresh9

"Be weird. Be random. Be who you are. Because you never know who would love the person you hide."

## Research Interests

My research primarily centers on cryptography and information security, with a special emphasis on creating efficient protocols for problems in the area of Secure Multi-party Computation (MPC). My work revolves around designing and implementing practical MPC protocols, as well as delving into the realms of privacy-preserving machine learning and federated learning. I have actively engaged in a diverse range of cryptographic areas, including Multi-party Computation, Verifiable Secret Sharing, Oblivious Transfer, Byzantine Agreement, Broadcast, as well as cutting-edge domains like Privacy-Preserving Machine Learning and Federated Learning.

## Education

#### Indian Institute of Science (IISc)

Bengaluru, India

Sep. 2017 - Jul. 2021 PH. D. IN COMPUTER SCIENCE Dissertation Area: Secure Multi-party Computation (MPC) & Privacy-Preserving Machine Learning (PPML)

- · Advisor: Prof. Arpita Patra
- CGPA: 9 / 10 (First Class with Distinction)

#### Indian Institute of Science (IISc)

M.Tech. (Research) in Computer Science Aug. 2014 - Jun. 2017

- Dissertation Area: Secure Multi-party Computation (MPC)
- · Advisor: Prof. Arpita Patra
- CGPA: 6.83 / 8 (First Class with Distinction)

#### Trivandrum, India

College of Engineering, Trivandrum (CET) B.TECH IN COMPUTER SCIENCE AND ENGINEERING

CGPA: 8.81 / 10 (First Class with Distinction)

Jul. 2010 - Apr. 2014

# **Professional Experience**

#### Technology Innovation Institute (TII)

Abu Dhabi, UAE

SENIOR MPC RESEARCHER

RESEARCH ASSOCIATE

RESEARCH INTERN

May. 2023 - Present

• Secure Multiparty Computation, Privacy-preserving Machine Learning

#### Technical University (TU) of Darmstadt

Darmstadt, Germany

POST-DOCTORAL RESEARCH IN COMPUTER SCIENCE

Oct. 2021 - Mar. 2023

- Area: Privacy-preserving Services On the Internet (PSOTI)
- Host: Prof. Thomas Schneider
- Research Group: Cryptography and Privacy Engineering (ENCRYPTO)

#### **Indian Institute of Science (IISc)**

Bengaluru, India

· Research associate under the guidance of Arpita Patra.

Aug. 2021 - Sep. 2021

#### Technical University (TU) of Darmstadt

Darmstadt, Germany

Nov. 2019

- Research work under the joint guidance of Thomas Schneider and Arpita Patra.
- The project aimed at improving the efficiency of secure two-party computation.
- Resulted in a publication at USENIX Security Symposium'21.

#### Amazon Development Centre

Bangalore, India

SOFTWARE DEVELOPMENT ENGINEER (SDE) INTERN

Jul. 2013 - Aug. 2013

· Worked on the project titled "Increase the registered and subscribed user base at Amazon" under the mentorship of Bhanu Pratap Singh in the International Expansion (Junglee Traffic) Team.

# **Awards, Scholarships and Achievements**

- Received Runner-Up Distinguished Paper Award at 2nd IEEE Conference on Secure and Trustworthy Machine Learning (IEEE SaTML'24).
- 2. Awarded commendation certificate for outstanding PhD thesis by Department of Computer Science and Automation at the Indian Institute of Science (IISc), Bangalore.
- 3. Nominated for the Schmidt Science Fellows 2022 program for post-doctoral research (one among a group of 350 highly accomplished candidates, nominated from 83 of the world's leading universities and institutes).
- 4. Represented country India in the "Window to the World" session at the 8th Heidelberg Laureate Forum.
- 5. Selected as one among 225 young researchers to participate in the 8th Heidelberg Laureate Forum.
- 6. Recipient of Google PhD Fellowship 2019 (one among 53 researchers around the globe).
- 7. Organiser of Secure Multi-Party Computation: Theory and Practice Workshop at Indian Institute of Science (IISc) from 19th to 22nd January, 2020.
- 8. Received travel grant to attend Privacy Preserving Machine Learning Workshop, CCS 2019, London.
- 9. Received travel grant to attend Workshop: Theory and Practice of Secure Multiparty Computation 2016, Aarhus University, Denmark.
- 10. Secured All India Rank of 807 with a score of 688 in GATE 2014 among (approximately) 1,55,190 students in India.
- 11. Ministry of Human Resource and Development (MHRD) Scholarship for Postgraduate education, India.
- 12. Best Outgoing student in Computer Science and Engineering (P Rathnaswamy Memorial Endowment) for the year 2014.
- 13. First prize in Coding Competition, CODESTORM, conducted by IEEE Computer Society (March 2013).
- 14. Received Ashok Leyland "ALL THE BEST" Scholarship for graduate studies, India (February 2011).
- 15. Recipient of Federal Bank Hormis Memorial Foundation Scholarship for graduate studies, India (2010-11).
- 16. Recipient of Indian Oil Education Scholarship for graduate education, India (2010-11).
- 17. Received Central Sector Scholarship by Department of Higher Education (MHRD) for graduate studies, India (2010).
- 18. Achieved a rank of 629 in Kerala Engineering Entrance (KEAM 2010) among (approximately) 100949 students.
- 19. Received Malayala Manorama Merit Scholarship (February 2008).
- 20. Received prize at CMS Math Prodigy Hunt 2009, organized by Centre for Research in Mathematics.
- 21. Participated in 20th Kerala Science Congress, Trivandrum (January 2008).
- 22. Participated in Youth Parliament Competition under the auspices of the Institute of Parliamentary Affairs, Government of Kerala.

# **Skills**

**Programming** C/C++, Java, Javascript, Python, PyTorch

**DevOps** AWS, Docker, Jenkins, Jira, SonarQube

**DBMS** Oracle, SQL

WebHTML5, CSS3, jQuery, JSPToolsNetBeans, Eclipse, VS Code, ETEX

### Personal Data

**Born** 24th April 1992 in Kerala, India

Citizenship Indian

Marital Status Married

**Languages** Malayalam (mother tongue), English, Hindi, Tamil

**Interests** Photography, Badminton, Cycling

Contact Email: ajith424suresh@proton.me, Mob.: (+91) 8762049224