

||Jai Sri Gurudev|| Sri Adichunchanagiri Shikshana Trust (R.)

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An Autonomous Institution under VTU from 2024-25 AICTE Approved, Accredited by NAAC with A+ Grade & NBA (CSE, ISE, ECE, ME, CV & AE), Gold Rated by QS I-Gauge

P.B. No.20, B.B Road, Chikkaballapur - 562 101, Karnataka

# INVITATION

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

SJC INSTIT

Organizing



ATAL ACADEMY SPONSORED SIX DAYS FACULTY DEVELOPMENT PROGRAM



On

## **"AI AND SECURITY: CURRENT TRENDS**

## **AND FUTURE RESEARCH"**

20TH - 25TH JANUARY 2025

**Divine Blessings** 

His Holliness Jagadguru Padmabhushan

## Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji

Founder President, SACST(R.)

His Holliness Jagadguru

## Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji

President, SACST(R.)

## Poojya Sri Sri Mangalanatha Swamiji

Secretary, SACST(R.), Chickaballapur Division

## ORGANIZING COMMITTEE

Mr. Kiran Kumar PN, Mrs. Swetha T Mrs. Rashmi KA, Ms. Gayathri V Assistant Professors, Dept. of CSE

FINANCE CHAIR

Mr. Suresha J Registrar

## PROGRAM CO-COORDINATOR

**Mr. Ajay N** Assistant Professor, Dept. of CSE

## ORGANIZING CHAIR

Dr. Manjunatha Kumar B H Dean Academics, Prof. & Head, Dept. of CSE

## PROGRAM COORDINATOR

**Dr. Shrihari M R** Associate Professor, Dept. of CSE

## PROGRAM CHAIR

Dr. G T Raju Principal











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### Under ATAL Scheme of AICTE New Delhi

Online Six Days Faculty Development Programme on "AI and Security: Current Trends and Future Research" 20<sup>th</sup> - 25<sup>th</sup> January, 2025 (No Charges for Registration, Course, Certificate)



ORGANIZED BY DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING SJC INSTITUTE OF TECHNOLOGY CHIKKABALLAPUR-562101, KARNATAKA. www.sjcit.ac.in



### **DIVINE BLESSINGS**

His Holiness Jagadguru Padmabhushan **Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji** Founder President, SACST(R.).

#### **CHIEF PATRON**

His Holiness Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Mahaswamiji President, SACST(R.).

**PATRON** Poojya **Sri Sri Mangalanatha Swamiji** Secretary,SACST(R.), Chikkaballapur Division.

**PROGRAM CHAIR Dr. G T Raju** Principal, SJCIT.

ORGANIZING CHAIR Dr. Manjunatha Kumar B H Dean Academics, Prof. & Head Dept. of CSE, SJCIT.

**FINANCE CHAIR Mr. Suresha J** Registrar, SJCIT.

## COORDINATOR

**Dr. Shrihari M R** Associate Professor Dept. of CSE, SJCIT. shrihari.mr@gmail.com, 9980019411.

### **CO-COORDINATOR**

**Prof. Ajay N** Assistant Professor Dept. of CSE, SJCIT. n.ajay2@sjcit.ac.in, 9740439787.

#### **ORGANIZING COMMITTEE**

Prof. Swetha T Prof. Rashmi K A Prof. Kiran Kumar P N Prof. Gayathri V Asst. Professors Dept. of CSE, SJCIT.

#### **ABOUT FDP**

Artificial intelligence, this year's most talked-about subject, is at the forefront of these trends. Platforms like ChatGPT have evolved significantly over the last year, carving out indispensable roles in consumer and corporate environments. Their initial appeal, powered by capabilities in conversational AI and generative image creation, only scratches the surface of their potential. The constantly changing environment in the security industry is a primary focus of concern. As advanced technologies like AI, SaaS, and IoT continue to emerge, businesses must align their strategies with these trends. Failing to do so can result in falling behind in the technology landscape and, even worse, leaving vulnerabilities that pose risks and damage your company's reputation.

Artificial intelligence, with all its wonders, also has a double-edged sword. The very technology driving innovation could also empower cyberattacks with more intelligent, more adaptable malware or phishing scams, making the cybersecurity game all the more challenging.

#### The topics covered:

- 1. Introduction to AI and Security.
- 2. Adversarial Attacks and Defenses.
- 3. Cryptography in AI.
- 4. Integration of AI and Blockchain.
- 5. AI-Powered Cybersecurity.
- 6. Securing AI Systems.
- 7. Introduction to GEN AI.
- 8. AI and Large Language Models (LLMs).
- 9. Mathematic for AI and Generative Models.
- 10. Generative Adversarial Networks (GANs).
- 11. Ethical Consideration in AI.
- 12. AI-Powered Security Tools.
- 13. Human-AI Collaboration.

### **OBJECTIVES**

- To familiarize participants with the current trends and advancements in AI and its applications in security.
- To equip participants with the knowledge and skills necessary to integrate AI and security concepts into their teaching and research.
- To provide a platform for participants to share their research experiences and learn from experts in the field of AI and security.

### OUTCOMES

After the Completion of FDP, Participants will:

- Integrate AI and security concepts into their teaching and research.
- Develop and implement AI-powered security solutions in their respective institutions.
- Publish research papers or articles on AI and security in reputable journals or conferences.

#### **ABOUT THE INSTITUTION**

Sri Jagadguru Chandrashekaranatha Swamiji Institute of Technology (SJCIT) is a premier institute, established in 1986 by Sri Adichunchanagiri Shikshana Trust(R) founded in 1974 by the divine soul Jagadguru Padmabhushana Sri Sri Sri Dr. Balagangadharanatha Mahaswamiji. The trust is under the astute visionary & spiritual guidance of Paramapoojya Jagadguru Sri Sri Dr. Nirmalanandanatha Mahaswamiji. SJCIT is one of the renowned technical institutions providing quality education in Karnataka. The college campus is spread over 64 acres of lush green environment and is located near Muddenahalli, the birthplace of the Architect of Modern India, Bharat Ratna Sir M. Visvesvarava. The college is situated on Bengaluru - Bellary National Highway (NH-44) about 50 kms from Bengaluru and 20 kms from Kempegowda International Airport. The Institution is accredited by NAAC with A+ grade and offers Nine UG Courses: ECE, CSE, ISE, ME, CE, AE AS, AI-ML & CV(Kan) and Five PG Courses in Engineering and MBA along with Nine VTU recognized R&D centers. The institute has an excellent track record of results with university ranks and placements in past years. Along with academics, the students also participate and excel in extra-curricular and co-curricular activities through active cultural, sports and social groups. Our goal is to mould students' info highly skilled technical and management professionals with a wide range of analytical, strategic and leadership capabilities to meet global challenges. Some of the highlights of our institution are as follows.

#### **HIGHLIGHTS:**

- 39+ years of excellence with relentless service to society imparting quality education.
- 3211+ UG, 180+ PG Students and 24000+ alumni network.
- 227+ Experienced, well qualified and Passionate faculty with 60+ Doctorates, 216+ Non-Teaching Staff.
- Consistently achieving 95% & above Results with Ranks and Medals at University Exams. 72 Ranks and 15 Gold Medals have been fetched so far.
- Training and Expert Guidance on Technical Domains for Placement and Career Development with blended training model.
- 100% Placement opportunity for all Students and more than 95% Placements for eligible candidates. 850+ job offers in 2022, 720+ job offers in 2023 with highest package of 28 LPA. 546+ job offers in 2024 and Currently 210+ (on-going) job offers and average package is 5.6 LPA.
- BGS-SJCIT Incubation foundation, IP Cell, EDC, CoEs, Student Excellence and Empowerment Development Center (SEED).
- BGS R&D Centre-BARC, NAIN, BOSCH REXROTH Automation . Centre.
- Completed funded projects worth 3 crores and ongoing sponsored projects worth 1 crore.

#### VISION

Preparing Competent Engineering and Management Professionals to Serve the Society.

#### MISSION

- Providing Students with a Sound Knowledge in Fundamentals of their • branch of Study.
- Promoting Excellence in Teaching, Training, Research and Consultancy.
- Exposing Students to Emerging Frontiers in various domains enabling Continuous Learning.
- Developing Entrepreneurial acumen to venture into Innovative areas. ٠
- Imparting Value based Professional Education with a sense of Social ٠ Responsibility.

#### **ABOUT THE DEPARTMENT**

The Department of Computer Science & Engineering was established in 1986 with an initial intake of 60 students, later expanded to 120, and subsequently to 180 students. Since its inception, the department has been a cornerstone of academic excellence and a source of pride for SJCIT. Affiliated with Visvesvaraya Technological University, Belagavi, and approved by AICTE, the department is dedicated to continuously enhancing the quality of education by fostering the growth and knowledge of both students and faculty. Over the years, the department has consistently excelled in its mission to produce highly skilled computer engineers who meet the dynamic demands of the IT industry. It continues to attract top engineering aspirants from across the country and boasts a wellqualified and experienced faculty team. The Department offers Undergraduate (B.E.), postgraduate (M.Tech.), and Doctoral (Ph.D.) programs in Computer Science and Engineering. The department has a team of well-qualified and experienced faculty members, and is equipped with state-of-the-art infrastructure, including high-end computing facilities.

A key highlight of the department is its Centre of Excellence in Artificial Intelligence & Machine Learning, which drives innovation and contributes to cutting- edge research. To bridge the gap between academia and industry, the department has established Memorandums of Understanding (MoUs) with leading organizations such as Inflow, Infosys, ABHAY and TCS, among others, enabling academic collaboration and fostering industry-aligned projects. At the Department of Computer Science & Engineering, we educate tomorrow's innovators, conduct advanced research in core and interdisciplinary fields, and lead initiatives that showcase the transformative power of computer science and engineering.

#### VISION

Building Proficient Computer Science Engineers having Core Values to Solve Real Life Problems.

#### MISSION

- Strengthening Students with Fundamental and Applied aspects in Design and Implementation of Computational Systems.
- Empowering the Students with Sound Knowledge in AI &ML, Data Analytics, Block Chain, AR and VR systems to Solve Multidisciplinary Problem.
- Developing Analytical Skills to meet the Complex, Societal and Industrial needs.
- Promoting Research blend of mind among Students enabling Continuous Learning.
- Encouraging Entrepreneurship including Ethical Values and Team building abilities.



#### **RESOURCE PERSONS**

#### Dr S B Goval Director Faculty of IT CU of Malaysia.

Dr. Thamme Gowda Senior Research Scientist Microsoft Translator Redmond, Washington, USA.

Mr. Kiran Kumar S PI & V Lead Intel Technology India Pvt Ltd Prof. & Head, Dept. of CSE Bangalore.

Dr. Manjunatha Kumar B H Dean Academics

SJCIT, Chickballapur.

Dr. Deepa Yogish

Dept. of CSE, CU

Prof. Deepak P

Bangalore.

Mysuru.

Associate Professor

Assistant Professor

Dept. of CSE, NIE

#### Mr. Sumanth B M Senior SV Engineer Intel technology India Pvt Ltd Bangalore.

Mrs. Asha R Software Engineer ANZ Operations & Technology Bangalore.

> Dr. Monika Puttaramaiah Associate Professor Dept. of Machine Learning BMSCE, Bangalore.

### Dr. Sanjav Singla

Dr. Praveen R.

Chennai.

Technical Analyst

ICU Medical India LLP.

Professor Computer Science. CU. Chandigarh.

#### **IMPORTANT DATES**

Last Date for Registration: 15/01/2025 Confirmation of Registration: 17/01/2025 Event Dates: 20/01/2025 to 25/01/2025

#### TARGET AUDIENCE

Professors/ Associate Professors/ Assistant Professors/ Ph.D. Scholars.

#### HOW TO APPLY

**No registration fee** for participants from AICTE approved institutes. Registration is limited to 100 participants and is on first come first serve basis. The interested participants are requested to complete the online registration formalities at https://atalacademy.aicte-india.org/

Application No.: 1730866155 **NOC Format:** https://acesse.one/EWKCo.

#### CERTIFICATE

Attendance will be monitored and certificate will be issued based on the minimum of 80% attendance and 70% marks in assessment, as per AICTE guidelines.

Dr. G T Raju Principal SJCIT Chickaballapur.

SCE&M, Mangalore.

Dr. Ananth Prabhu G

Professor

Dept. of CSE

## ||Jai Sri Gurudev||

## SJC Institute of Technology

## Department of Computer Science and Engineering

ATAL Online 6 Days Faculty Development Programmes 2024-25 Schedule

### FDP Thrust Area: Engineering and Management

## FDP Title: AI and Security: Current trends and Future Research

End Date: 25/01/2025

Start Date: 20/01/2025

Start Du						
	Day 1: Monday (20/01/2025)	Day 2: Tuesday (21/01/2025)	Day 3: Wednesday (22/01/2025)	Day 4: Thursday (23/01/2025)	Day 5: Friday (24/01/2025)	Day 6: Saturday(25/01/2025)
Faculty Co-ordinator	Mrs. Swetha T	Mr. Kiran Kumar P N	Mrs. Rashmi K A	Mrs. Swetha T	Mr. Kiran Kumar P N	Mrs. Rashmi K A
Student Co-ordinator	Ashok Gowda C R	Ashok Gowda C R	Lubna Saira J	Lubna Saira J	Aishwarya S S	Aishwarya S S
Inaugural Session	6:00PM to 6:30PM					
Session	Session 1: 6:30PM to 8:00PM	Session 3: 6:00PM to 7:30PM	Session 5: 6:00PM to 7:30PM	Session 7: 6:00PM to 7:30PM	Session 9: 6:00PM to 7:30PM	Session 11: 2:00PM to 3:30PM
Торіс	Introduction to AI and Security	Cryptography in AI	AI-Powered Cybersecurity	Introduction to GEN AI	Mathematic for AI and Generative Models	Ethical Consideration in AI
Name of the Expert	Dr. S B Goyal	Dr. Ananth Prabhu G	Mrs. Asha R	Dr. Manjunatha Kumar B H	Dr. G T Raju	Prof. Deepak P
Designation & Organization	Director, Faculty of Information Technology, City University of Malaysia.	Professor, Dept. of CSE, Sahyadri College of Engineering & Management, Mangalore	Software Engineer ANZ Operations and Technology, Bangalore.	Dean Academics, Prof. & Head Dept of CSE. SJCIT, Chickballapur.	Principal SJCIT, Chickaballapur.	Assistant Professor Dept. of CSE, NIE, Mysuru.
	Years of Exp:20	Years of Exp: 15	Years of Exp:11	Years of Exp:20	Years of Exp:30	Years of Exp:11
Session	Session 2: 8:00PM to 9:30PM	Session 4: 7:30PM to 9:00PM	Session 6: 7:30PM to 9:00PM	Session 8: 7:30PM to 9:00PM	Session 10: 7:30PM to 9:00PM	Session 12: 3:30PM to 5:00PM
Торіс	Adversarial Attacks and Defenses	Integration of AI and Blockchain	Securing AI Systems	AI and Large Language Models (LLMs)	Generative Adversarial Networks (GANs)	AI-Powered Security Tools
Name of the Expert	Mr. Kiran Kumar S	Mr. Sumanth B M	Dr. R. Praveen	Dr. Thamme Gowda	Dr. Sanjay Singla	Dr. Monika P
Designation & Organization	Platform Integration and Validation Lead, Intel Technology India Pvt Ltd, Bangalore.	Senior Software Validation Engineer Intel technologies India pvt ltd, Bangalore.	Technical Analyst ICU Medical India LLP, Chennai.	Senior Research Scientist & Microsoft Translator, Redmond, Washington, USA.	Professor - Computer Science, Chandigarh University, Chandigarh.	Associate Professor, Dept. of Machine Learning (AI&ML), BMSCE, Bangalore.
	Years of Exp:21	Years of Exp:20	Years of Exp:18	Years of Exp:12	Years of Exp:20	Years of Exp:18
Session						Session 13: 5:00PM to 6:30PM
Торіс						Human-AI Collaboration
Name of the Expert						Dr. Deepa Yogish
Designation & Organization						Associate Professor Dept. of CSE, CHRIST University Years of Exp:18
Online Test & Feedback						6:30PM to 7:30PM
Valedictory Session						7:30PM to 8:00PM