# Abhijeet Vijay Salunke

# Curriculum Vitae

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# **Current Employment**

Assistant Professor in the Computer Engineering Department at Sardar Patel Institute of Technology, Mumbai, India

#### Research Interest

Mobile Application Analytics, Computer Networks, Wireless Measurements Studies and Virtualization

#### Education

# • Masters of Engineering in Computer Engineering

June 2012-July 2014

University of Mumbai, India

Research Advisor: Prof. Dayanand Ambawade

Topic: SAEER: Security Aware Energy Efficient Routing Protocol For Wireless Sensor Networks

#### • Bachelor of Engineering in Computer Engineering

June 2007 - May 2011

University of Mumbai, India

# Experience

#### • Assistant Professor

August 2016 - Present

Department of Computer Engineering

Sardar Patel Institute of Technology, Mumbai, India

Faculty Profile: https://comp.spit.ac.in/faculty/prof-abhijeet-salunke/

#### • Programmer Analyst

Jan 2016 - July 2016

Banking and Finance Services, Java Developer

Cognizant Technology Solutions India Private Limited, Pune, India

https://www.cognizant.com/us/en/about-cognizant

# **Publications**

Google Scholar Profile: https://scholar.google.com/citations?user=q60rbH0AAAAJ&hl=en IRINS Profile: https://spit.irins.org/profile/422082

- 1. Hate Speech and NSFW Image Classification using BERT and ResNet-34 model, 5th International Conference on Recent Trends in Computer Science and Technology, ICRTCST 2024
- 2. Smart Crop Cultivation: Harnessing Machine and Deep Learning for Informed Agricultural Practices, 3rd International Conference on Applied Artificial Intelligence and Computing, ICAAIC 2024
- 3. Automated Library Management System using Face Recognition and OCR, 4th International Conference for Emerging Technology, INCET 2023
- ML-Based Retail Innovations: Virtual Fitting, Scanning and Recommendations, 2nd International Conference on Electrical, Electronics, Information and Communication Technologies, ICEEICT 2023
- 5. Doc-Chain: A University Document Verification Blockchain, IEEE International Conference on Blockchain and Distributed Systems Security, ICBDS 2022, India
- 6. Using ML Models to Predict Points in Fantasy Premier League, Asian Conference on Innovation in Technology, ASIANCON 2022, India
- 7. Comparative study of trust and reputation security model in IoT net- work, International Conference On Intelligent Computing and Control Systems 2019, India
- 8. Fire contour approximation algorithm for bord-and-pillar coal mine:Revisited, Sensors Applications Symposium 2018, IEEE SAS 2018, Seoul
- 9. Dynamic Sequence Number Thresholding protocol for detection of blackhole attack in Wireless Sensor Network, International Conference on Communication, Information & Computing Technology 2015, IEEE ICCICT 2015, India

#### Consultancy and Sponsored Projects

• Project Type: Consultancy

Title: AI Chatbot

Funding Agency: Yamini India Ltd. (eBZaar)

Duration: 1 Years

Approved Budget: Rs 16350/-

Objective: To create AI enabled chatbot for ecommerce of grocery stores. This was meant to local stores to automate order placements and confirmation.

• Project Type: Research(Not Funded)

Title: Automatic Smart Attendance System

Funding Agency: IB-Hub

Duration: 1 Month

Objective: This system was to assist the attendance system and not to replace it. This system uses students mobile phones location services to find out whether they are in college premises or not.

#### Awards and Honors

- Mentored team CyberYoddha for project SpamKavach under problem statement "To detection Email, SMS and Call Spam" who were Grand Finalist KAVACH Cyber Security Hackathon 2023
- Mentored team Hashiras for project ManSick under problem statement "To automate and compute the
  detection of possible vulnerability to depression before its onset" who won Smart India Hackathon
  2022
- Mentored team won 2nd position at the Fleet telematics Business Insight Competition, Techfest 2022, IIT Bombay, Team members: Shubh Gupta, Nishant Zaveri and Sanika Tiwarekar
- Placed  $3^{rd}$  in the class while pursuing my Master's degree.
- Placed  $2^{nd}$  in the class while pursuing my Bachelor's degree.

# Professional Development and Training

# • MOOC Development and Delivery

UGC HRDC, 2021-22

Grade: A

Participated in two weeks UGC Sponsored Interdisciplinary/Multidisciplinary Refresher Course by HRDC Ranchi University.

# • Artificial Intelligence and Robotic Process Automation: Tools, Techniques, Challenges and Solutions

AICTE-ISTE, 2021-22

Participated in one weeks AICTE Sponsored Refresher/Orientation Course by Sardar Patel Institute of Technology, Mumbai, Maharashtra.

#### • Machine Learning

IIT Kanpur, 2020-21

Participated in two weeks Faculty Development Program for CAS on Machine Learning

#### • Data Science

IIT Kanpur, 2020-21

Participated in two weeks Faculty Developement Program for CAS on Data Science

#### • IoT BootCamp

IB-Hub, 2018

Participated in a 5-day intensive IoT BootCamp.

#### • Image and Object Classification with DIGITS

Nvidia Deep Learning, 2018

Completed a 1-day workshop on image and object classification using DIGITS.

# • Artificial Intelligence and Deep Learning

Bennett University, 2018

Successfully completed a 3-day course on artificial intelligence and deep learning.

# • Pushing Boundaries of Wireless Technologies

ISTE-SPIT, 2017

Participated in a 5-day program focused on pushing the boundaries of wireless technologies.

#### • NEN Entrepreneurship Educator Program

Wadhwani Foundation, 2016

Enrolled in a 2-day program to become an entrepreneurship educator.

#### • Design Thinking

SPIT, 2016

Attended a 2-day workshop on design thinking methodology.

#### Administration

#### Institute Level

- 1. Admission Committee 2017 onwards till date
- 2. Library Committee 2022 onwards till date
- 3. Internship NOC Committee 2021 onwards till date
- 4. Convocation Committee 2018 onwards till date
- 5. IoT SIG Member since 2017-18
- 6. SCOPE Course Coordinator for Suven Technology 2018-20
- 7. SCOPE Course Coordinator for JPMC for 2019-20
- 8. CS Lab By Credit Suisse Coordinator for Year 2018-19
- 9. SCOPE Course Coordinator IoT Reliance Unlimit 2017-18
- 10. Admission Mass Mailer Coordination 2022
- 11. ICCICT Conference TPC Committee 2021
- 12. Organizing Committee Interthrone 2017 and 2019

#### Department Level

- 1. Ecell Coordinator from 2016-17 onwards till date
- 2. R&D Coordinator from 2016-17 onwards till date
- 3. Project Coordinator 2017-20
- 4. IIC Cell Coordinator from 2019-23
- 5. IEDC Committee members from 2020-21 onwards till date
- 6. IPR Committee member from 2020-21 onwards till date
- 7. Department Exam Coordinator for 2020-21
- 8. JUNFO ERP Department Coordinator 2019-22
- 9. Syllabus Coordinator 2017-19 and 2022 onwards till date
- 10. NBA UG Criteria Coordinator 7 for AY 2016-17 onwards till date
- 11. NBA PG Criteria 6 Coordinator from 2018-19 onwards till date
- 12. NAAC Criteria 1.1, 3.2, 4.3, and 6.5
- 13. Mentoring Students from 2016-17 onwards till date
  - 2016-17: TE Comp Batch-C
  - 2017-18: BE Comp Batch-C
  - 2018-19: SE Comp Batch-C
  - 2019-20: TE Comp Batch-C
  - 2020-21: BE Comp Batch-C
  - 2021-22: SE Comp Batch-C

- 2022-23: BE COMP Batch-D, TE COMP Batch-C, FE Div-B Batch-B1
- 2023-24: SE Comp Div-A Batch-C, FE Div-C Batch-C2, FE Div-G Batch-G3, FE Div-H Batch-H4
- 14. ABL3 Coordinator for 2020-21
- 15. Mentored SEVA/SATVA Batches 2020-21
- 16. Syllabus Setting for Different Years
  - 2016-17: Object Oriented Programming, Linux-C lab, Data Communication and Internet of Things
  - 2017-18: Mobile Communication and Computing, Structured and Object Oriented Analysis and Design
  - 2018-19: Major Project-I, Major Project-II
  - 2019-20: Structured and Object Oriented Analysis and Design
  - 2020-21: Computer Communication and Networks(SE), Problem-Solving Object-Oriented Programming (FE), Main Project Stage-I (BE), Main Project Stage-II (BE), Mini Project-II (BE), Human Machine Interaction (PE), Internet of Things (PE)
  - 2022-23: Data Driven IoT(OE), Problem Solving using Imperative Programming(FE)

# Professional/Industrial Activities

Industrial Visits, Expert Talks, Events, Guest Lectures, STTP, FDP, Judge, Workshop, Industrial/Professional Training, Symposiums and many more.

#### Organized

- 1. Organized Python Workshop for SY students by Divyaank Tiwari 2022-23
- 2. Organized Guest/Expert Talk by Adwait Hedge on ANOVA 2022-23
- 3. Organizing Committee Research Colloquium 2022
- 4. As a judge for the competition "Fueling Your Imagination" by E-Cell SPIT, 2020-21
- 5. Internship Evaluation as Internal Expert for 2020-21.
- 6. Coordinated Expert talk by Lori Beers, CIO Global Business, JPMC held in IIT Bombay about "Global perspective on Advancement in Technology" on 5th Nov 2019
- 7. Organized International "IoT Symposium" 2017-18.
- 8. One Week FDP on "Technology Convergence and Its Practices" in collaboration with IEEE and WIE from Dec 19 to 23 Dec, 2016
- 9. Two days workshop on "Android Application development" from 24 to 25 September 2016
- 10. A Guest Lecture by Dhaval Dalal on "Think Objects" to helps students understand interplay between object oriented design and coding.
- 11. Organized Talk on "Opportunity for Higher Studies in Abroad", 2018-19

# Conducted

- 1. Resource person for hands-on Session on "Insight into intelligent Automation Machine Learning and Data Science: PySpark in Google Colab", 2020-21.
- 2. Guest Lecture on "BlockChain and Cloud Computing Lecture" in VIVA Institute of Technology, 2018-19

# **Outreach and Industrial Interaction**

#### 1. Chairman

Industry: MeritTrack

Conducted MH-CET, LLB, B.Ed Exam 2021-22

#### 2. Chairman

Industry: MotFire Management Service Pvt. Ltd. Conducted GMAT Exam 2021-22

- 3. As a judge for the competition "SPECTRA-The Fest: Hackathon" by SPCE, 2020-21
- 4. Industrial Visit and Meet at JP Morgan India Services Pvt Ltd on 26th Sept 2019
- 5. Industrial Meet Automation Expo on 26th Sept 2019
- Guest Lecture on "BlockChain and Cloud Computing Lecture" in VIVA Institute of Technology, 2018-19

# Professional Membership

- ACM Student Member since 2022.
- ISTE Member since 2017.

# Courses Taught

- 2016-17: Structured and Object Oriented Analysis and Design(93.44%), Mobile Communication and Computing(100%), Network Technology Lab(90%), StructuredProgramming Approach Lab, Big Data Analysis Lab
- 2017-18: Computer Networks (92.35%), Computer Network Lab(91.35%), Programming Methodology Data Structure Lab(Odd Sem), Mobile Communication and Computing (96.35%), Mobile Communication and Computing Lab (96.28%), Web Technology Lab, Programming Methodology Data Structure Lab (Even Sem)
- 2018-19: Data Communication and Computer Networks, Data Communication and Computer Networks Lab, Enterprise Technology Lab, Operating System, Operating System Lab, Human Machine Interaction
- 2019-20: Embedded System and Real Time Operating System(91.22%), Structured Programming Approach (97.32%), Structured Programming Approach Lab (99.61%), Data Communication and Computer Networks Lab(92.5%), Python Programming Lab(93.75%)
- 2020-21:Probability and Statistics(95%), Computer Communication and Network(93.02%), Computer Communication and Network Lab (99.61%), Embedded System and Real Time Operating System, Embedded System and Real Time Operating System Lab
- 2021-22: Probability and Statistics(88.96%), Object Oriented Programming (100%), Problem Solving using Imperative Programming (93.37%), Problem Solving using Object Oriented Programming (COMP-B) (86.16%), Probability and Statistics (DSE) (85%)
- 2022-23: Probability and Statistics (82.86%), Computer Communication and Networks (81.51%), Problem Solving using Imperative Programming (100%), Problem Solving using Object Oriented Programming (91.20%)