



Department of

Computer Science & Engineering

NEWSLETTER

JAN-DEC 2025 • ISSUE 05

Parala Maharaja Engineering College
Sitalapalli, Berhampur - 761003
Odisha, India

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Message From Principal's Desk

Dear all,
It gives me immense pleasure to introduce our institution. PMEC is situated at Sitalapalli, Berhampur which came into existence in the year 2009 as an initiative of Government of Odisha in order to promote higher technical education in the state. Since its inception, it has emerged as one of the fastest developing technical institutions of the state. With a vision of developing technocrats, we strive to build the qualitative technical personnel. Thus, I congratulate Department of Computer Science and Engineering for attaining different achievements in this session and also wish the newsletter editorial team for making this 5th newsletter a success.



Prof. (Dr.) Chitta Ranjan Mohanty

Principal

PMEC, Berhampur

Message From Head of Department

Dear all,
Welcome to the Department of Computer Science and Engineering at Parala Maharaja Engineering College, Berhampur, Odisha. The department works with the objective of addressing critical challenges faced by the Industry, society and the academia. Perhaps even more important is our unceasing commitment to our students, helping them to learn, grow, develop, and achieve their goals in their pursuit to excel in their professional career.

Thus, I congratulate Department of Computer Science and Engineering for attaining such achievements in this session and also congratulate the newsletter preparation team for making our 5th newsletter a success. I also wish good luck to the Department of CSE for moving in the process to achieve the vision and mission.



A handwritten signature in blue ink, appearing to read 'R. Sing', enclosed in a white rounded rectangular box.

Dr. Ranumayee Sing

HoD, CSE

PMEC, Berhampur

Message From

Faculty Coordinator, Newsletter



Dr. Debasis Mohapatra
(Asst. Professor)

Dr. Sourav Kumar Bhoi
(Asst. Professor)

Mr. Kisan Prayag Patro
(Asst. Professor)

Ms. M Soujanya
(Asst. Professor)

Dear all, Welcome to the Department of Computer Science and Engineering at Parala Maharaja Engineering College, Berhampur, Odisha. We thank Principal, PMEC Berhampur and HoD, CSE for supporting a lot in preparation of this 5th issue of the Newsletter for Dept. of CSE.

We thank the students and faculties of this department for getting many achievements in different sectors such as placements, research and development, trainings, infrastructure, professional development activities, academic and extracurricular activities, etc. Furthermore, We also thank the student coordinators of this newsletter editorial team to make the 5th issue of this Newsletter a success.

Departmental **Vision and Mission**

Vision: The Department is committed to continually improve its educational environment in order to develop graduates with the strong academic and technical backgrounds needed to achieve distinction in the discipline.

Mission: The Mission of Department of Computer Science and Engineering is to:

- Provide theoretical and applied foundations of computer science and train students to effectively apply this education to solve real-world problems.
- Build a strong teaching environment that responds swiftly to the challenges of 21st Century.

Faculty **Members**



Faculty Information



Mr. Kodanda Dhar Naik
(Asst. Professor)

Domain Area

- Cloud Computing
- Advance Computer Architecture
- Resource Allocation & Scheduling



Dr. Debasis Mohapatra
(Asst. Professor)

Domain Area

- Complex Networks
- Machine Learning
- Social Network Privacy and Analysis
- Sentiment Analysis
- ML & DL
- Algorithm Design
- Automata Theory



Dr. Sasmita Rani Behera
(Asst. Professor)

Domain Area

- Mobile Edge Computing
- Operating Systems
- Task Offloading
- Networking
- Software Engineering



Dr. Ranumayee Sing
(Asst. Professor & HoD, CSE)

Domain Area

- IoT Based Fog Computing
- Optimization
- Artificial Intelligence and Machine Learning



Dr. Mitali Sinha
(Asst. Professor)

Domain Area

- VLSI
- Networking
- RTS
- SDN

Faculty Information



Dr. Rashmi Ranjan Sahoo
(Asst. Professor)

Domain Area

- Trust Management in WSL
- Cloud Computing
- Federated Learning
- Deep Neural Network



Dr. Niranjana Panigrahi
(Asst. Professor)

Domain Area

- Wireless Sensor Network
- Edge Computing
- Metaheuristics Algorithms



Dr. Kalyan Kumar Jena
(Asst. Professor)

Domain Area

- Image Processing,
- ML & DL
- IoT
- Recommender System



Dr. Sourav Kumar Bhoi
(Asst. Professor)

Domain Area

- IoT, Edge/Fog Computing,
- VANETs
- Sensor Network
- ML & DL
- Information Security
- Cryptography & Network Security

Faculty Information



Mr. Amar Ranjan Dash
(Asst. Professor - Guest Faculty)

Domain Area

- Web Accessibility
- Algorithm Optimization



Mrs. Chapala Maharana
(Asst. Professor - Guest Faculty)

Domain Area

- Soft Computing
- Data Mining
- AI & ML
- Big Data Analytics



Mrs. Subhasmita Nibedita
(Asst. Professor - Guest Faculty)

Domain Area

- Edge Computing and Cyber Security
- Database Engg.
- Algorithms Design



Mrs. Rashmi Rani Panda
(Asst. Professor - Guest Faculty)

Domain Area

- Cyber Security
- Algorithm Design
- Optimization
- AI & ML
- IoT
- Web Technology



Mr. Kisan Prayag Patro
(Asst. Professor - Guest Faculty)

Domain Area

- Cloud Computing
- IoT
- Computer Networking
- Cryptography & Networking Security

Faculty Information



Ms. M Soujanya
(Asst. Professor - Guest Faculty)

Domain Area

- Machine Learning
- Deep Learning
- IoT



Dr. Diptimayee Sahu
(Asst. Professor - Guest Faculty)

Domain Area

- Cyber Security
- Machine learning
- Deep learning
- SPM



Ms. Sonali Priyadarshini Mohapatra
(Asst. Professor - Guest Faculty)

Domain Area

- AI & ML
- IoT
- Cloud Computing



Ms. Ritu Jena
(Asst. Professor - Guest Faculty)

Domain Area

- AI & ML

College Level

Responsibility of Faculties

SL. No.	Name OF Faculty	Responsibility
1	Mr. Kondanda Dhar Naik	<ol style="list-style-type: none">1. Registrar, PMEC2. Treasurer, Agile Society3. FIC, Department Grievance4. FIC, Department Library
2	Dr. Ranumayee Sing	<ol style="list-style-type: none">1. HoD, CSE Dept2. Program Officer NSS3. Startup & Innovation Member4. ED Cell Member
3	Dr. Debasis Mohapatra	<ol style="list-style-type: none">1. FIC, Startup and Innovation2. IQAC Member3. Warden, Debabrata Hall of Residence4. ED Cell Member
4	Dr. Sasmita Rani Behera	<ol style="list-style-type: none">1. FIC, Central Library2. T&P Cell Coordinator
5	Dr. Mitali Rani Sinha	<ol style="list-style-type: none">1. FIC, Dramatic Club
6	Dr. Rashmi Ranjan Sahoo	<ol style="list-style-type: none">1. FIC, COE Lab2. FIC, Guest House3. FIC, Internet & Networking
7	Dr. Niranjana Panigrahi	<ol style="list-style-type: none">1. Asst. Warden Ekalavya Hall of Residence2. FIC, Robotics Club
8	Dr. Kalyan Kumar Jena	<ol style="list-style-type: none">1. FIC, Coding Club2. FIC, SAP Training3. Faculty Advisor, Idea and Innovation Cell,4. FIC, Dept. Timetable
9	Dr. Sourav Kumar Bhoi	<ol style="list-style-type: none">1. FIC, Coding Club,2. Faculty Advisor, Idea and Innovation Cell3. FIC, Newsletter4. FIC, Dept. Research and Development

Laboratories



Laboratory Information

Facilities

1. C, C++ Compilers
2. Java SE Development Kit, Microsoft Visual Studio
3. My Eclipse, Netbeans IDE
4. Apache Tomcat
5. My SQL, Oracle
6. PARAM Shavak DL GPU, PARAM Shavak Parallel Computing Server(SuperComputer)
7. Python and Machine Learning Tools
8. Other necessary compilers, softwares and hardwares for computing
9. High Speed Internet Capability
10. New Operating Systems

Types Of Labs

1. Object Oriented Programming Lab
2. Software Engg. Lab
3. System Programming Lab
4. Advance JAVA Lab
5. Operating System Lab
6. Computer Graphics Lab
7. Design & Analysis of Algorithm Lab
8. Database Engg. Lab
9. Formal Language Automata Theory Lab
10. Compiler Design Lab
11. Data Structure Lab
12. Computer Network Lab
13. Computer Organization Lab
14. Java Lab
15. Cyber Security Lab

Department **Society**





“Agile” was formed in July, 2017 as a computer science and engineering society of PMEC, Berhampur whose basic objective is to organize different events such as seminar, webinar, workshop, conference, courses, training, competitions, research activities, etc. for the development of department, college, and society. All current faculties and students of CSE Department, PMEC Berhampur are members of this society.

Faculty Coordinators/Treasurer

Dr. Sasmita Rani Behera (CSE)

Dr. Kalyan Kumar Jena (CSE)

Sri. Kodanda Dhar Naik (CSE)

Department **Activites**



Departmental Activities (Jan - Dec 2025)

Activity	Domain	Organized By	Date Conducted	Duration	No. of Participant
Quiz, GD and Marshalling code on Vikshit Odisha and Debate Competition	Technical	Dept. Of CSE, PMEC Berhampur	22/02/2025 to 23/02/2025	2 days	50+
Tech Fest Programme	Technical	Dept. Of CSE, PMEC Berhampur	03/03/2025 to 04/03/2025	2 days	80 +
ICMIB 2025, Springer, International Conference	Technical	Dept. Of CSE, PMEC Berhampur	04/04/2025 to 06/04/2025	3 days	500 +
Jalachatra Program	Societal	Dept. Of CSE, PMEC Berhampur	23/04/2025	1 day	100
Student Felicitation and Interaction Programme	Technical	Dept. Of CSE, PMEC Berhampur	13/05/2025	1 day	100
One week workshop on Applied ML: "TRAIN THE TRAINER"	Technical	Dept. Of CSE, PMEC Berhampur	02/09/2025 to 06/09/2025	5 days	100+
Newsletter Release	Technical	by Agile Society, Dept. of CSE, PMEC Berhampur	06/09/2025	1 day	100+
Engineer's Day Celebration	Technical	Dept. Of CSE, PMEC Berhampur	15/09/2025	1 day	100

ICMIB 2025



The Department of Computer Science and Engineering, Parala Maharaja Engineering College (PMEC), Berhampur, has organized the 5th International Conference on Machine Learning, IoT and Big Data (ICMIB-2025) from 4–6 April 2025. The conference featured keynote addresses by **Prof. Nitin Vaidya (Georgetown University)** on Fault-Tolerant Distributed Optimization and Learning, **Prof. Ram Bilas Pachori (IIT Indore)** on Machine Learning-enabled Multichannel Signal Processing for Medical Applications, and **Prof. Srinjoy Mitra (University of Edinburgh, UK)** on Electronics for Healthcare and Neuroscience. ICMIB-2025 provided a global platform for researchers, academicians, industry experts, and students to exchange ideas on intelligent systems, data analytics, automation, and emerging data-driven technologies, reinforcing PMEC’s commitment to research, innovation, and interdisciplinary collaboration.

Welcome Function (2024-25)



The Department organized Fresher's Day to warmly welcome the new batch of students into the college community. The event was filled with vibrant decorations, enthusiasm, and a cheerful atmosphere that made it truly special.

The program began with inspiring words from respected faculty members and senior students, who extended their best wishes to the freshers. Cultural performances, interactive games, and engaging activities organized by the seniors added energy and excitement to the celebration.



A key highlight was the friendly interaction between seniors and freshers, which created a supportive and comfortable environment. The event successfully built confidence, strengthened bonds, and marked a positive beginning to the students' academic journey.

Train

the Trainers



The Department of Computer Science successfully conducted a one-week workshop on Applied Machine Learning, aimed at providing students with practical exposure to modern machine learning techniques and real-world applications.

The workshop featured Dr. Anabik Pal, Asst. Professor, IISER Berhampur as the guest lecturer, who delivered insightful sessions covering core concepts, hands-on demonstrations, and emerging trends in applied ML. Participants gained valuable knowledge on data-driven problem solving, model development, and industry-relevant practices.

Newsletter Release - 2025

On the day of the guest lecture, the Newsletter-2024, Issue 4 of the Department of Computer Science was formally released. The release coincided with the presence of Dr. Anabik Pal, marking a memorable moment of the workshop. The occasion highlighted the department's commitment to academic dissemination, knowledge sharing, and documenting scholarly and co-curricular achievements.



Faculty **Achievements** **(Jan-Dec 2025)**



Faculty Achievements

Jan - Dec 2025

Name	Activity	Activity Information	Area	Status
Dr. Debasis Mohapatra	Research Project	OURIIP, Govt. of Odisha	Complex Network	Completed
Dr. Sourav Kumar Bhoi Dr. Kalyan Kumar Jena Dr. Debasis Mohapatra	Patent	INDIAN Patent	Distributed Computing (Utility)	Granted
Dr. Sourav Kumar Bhoi Dr. Kalyan Kumar Jena Dr. Debasis Mohapatra	Patent	INDIAN Patent	Security (Utility)	Granted
Dr. Sourav Kumar Bhoi Dr. Kalyan Kumar Jena	Patent	INDIAN Patent	IoT (Design)	Granted
Dr. Sourav Kumar Bhoi Dr. Kalyan Kumar Jena	Patent	INDIAN Patent	IoT (Design)	Granted



Faculty Achievements

Key Highlights (Jan - Dec 2025)



An invited talk by Dr. S. K. Bhoi at Disha College of Management and Technology on BCA CAREER AND TECHNOLOGY



An invited talk by Dr. S. K. Bhoi at KV Gopalpur ON CYBER SECURITY AWARENESS PROGRAMME



An invited talk by Dr. Debasis Mohapatra at Khallikote Unitary University Berhampur on ADVANCES IN ALGORITHM



Certificate awarded to Mrs. Chapala Maharana for Advanced R Programming for Data Analytics in Business

Faculty Achievements

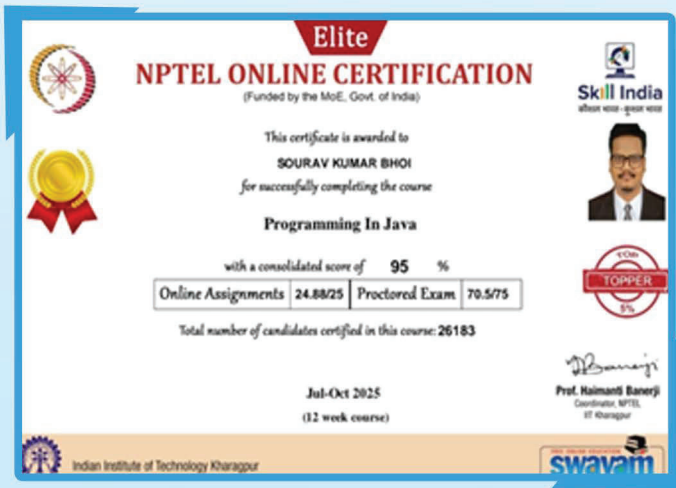
Key Highlights (Jan - Dec 2025)



Institution Award by Institution of Engineers (India), Odisha State Center (Dr. Sourav Kumar Bhoi)



Institution Award by Institution of Engineers (India), Odisha State Center (Dr. Kalyan Kumar Jena)



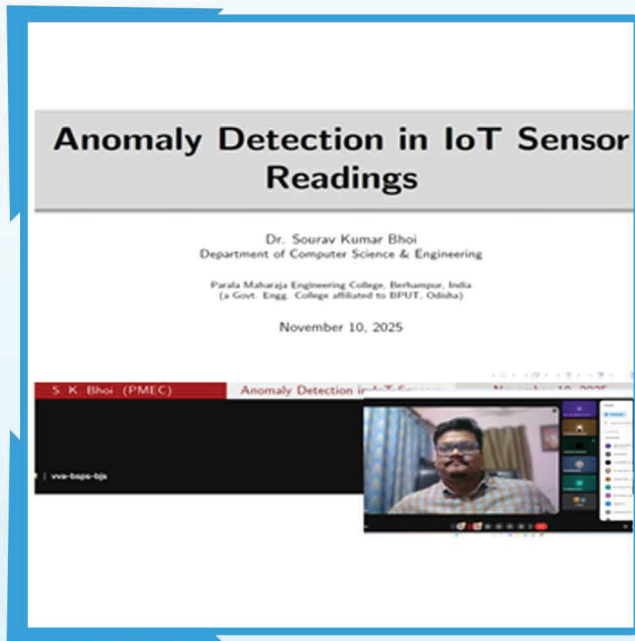
Dr. Sourav Kumar Bhoi Topper in NPTEL exam



Dr. Kalyan Kumar Jena Topper in NPTEL exam

Faculty Achievements

Key Highlights (Jan - Dec 2025)



An invited talk by Dr. S. K. Bhoi at the Next Gen Research and Innovation Hub



Honored to be invited as a Jury Member for the Odisha AI Hackathon (Dr. S. K. Bhoi)



Member of juries in Cluster-level Rajya Stariya Bal Vaigyanik Pradarshani-2025 held at KV Gopalpur Military Station (Dr. Niranjan Panigrahi)



PMEC proudly secured third place in the BPUT Hackathon, Mentor Dr. Niranjan Panigrahi

Faculty Achievements

Key Highlights (Jan - Dec 2025)



Dr. Debasis Mohapatra Honored with Invitation as Jury Member for the Odisha AI Symposium Hackathon



Dr. Debasis Mohapatra was invited on Orientation Programme for students of the Department of MCA at Khallikote Unitary University, Berhampur.



Dr. Sasmita Rani Behera awarded for Completion of PhD 11th Convocation at BPUT Rourkela



Dr. Ranumayee Sing awarded for Completion of PhD 12th Convocation at BPUT Rourkela

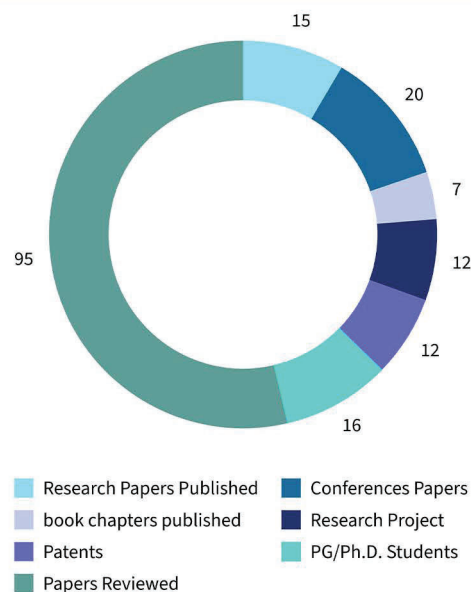


Dr. Mitali Sinha awarded for Completion of PhD at IIT Bhubaneswar

Faculty Achievement

Jan-Dec 2025

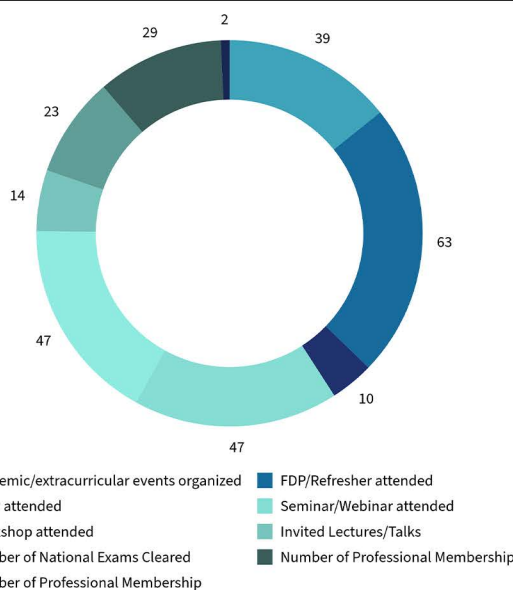
SL. No.	Achievements	Total
1	Total Number of Research Papers Published in Peer Reviewed/UGC/Scopus/SCI/SCI-E/ AICTE Journals	15
2	Total Number of International or National Conferences Papers Presented/ Processdings Published	20
3	Total Number of Books edited/book chapters publised	7
4	Total Number of Research/Consultancy Projects undergoing/completed	12
5	Patents granted/Filed/Applied	12
6	Total Number of PG/Ph.D. Students guiding/guided	16
7	Total Number of Research papers Reviewed	95



Faculty Achievement

Jan-Dec 2025

SL. No.	Achievements	Total
8	Total Number of academic/ extracurricular events organized	39
9	Total Number of FDP/ Refresher attended	31
10	Total Number of STTP attended	10
11	Total Number of Seminar/Webinar attended	47
12	Total Number of Workshop attended	15
13	Total Number of Invited Lectures/Talks	14
14	Total Number of National Exams Cleared (NITTT/NPTEL/AICTE/etc.)	23
15	Total Number of Professional Membership Taken	29
16	Total Number of International/National Awards Received	2



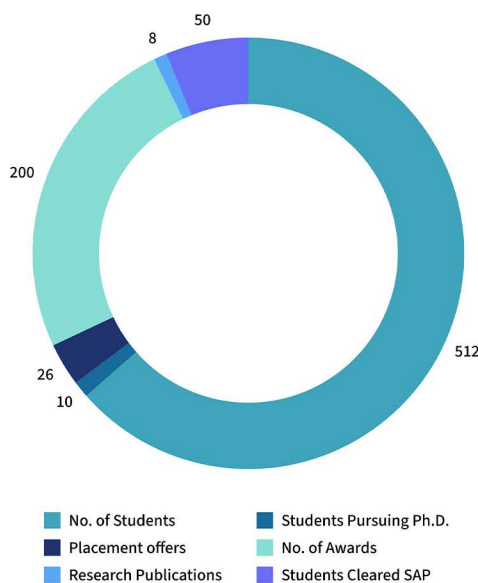
Students **Achievements** (Jan-Dec 2025)



Student Achievement

Jan-Dec 2025

SL. No.	Achievements	Total
1	No. of students studying B. Tech CSE in academic year 2023-2025	512
2	No. of Students Pursuing Ph.D. Research work at Dept. of CSE, Nodel Centre of Research - PMEC Berhampur, BPUT in year 2025	10
3	No. of Placement offers from different Companies for 2021-25 Batch (some Data as per T&P)	26
4	No. of Awards, Appreciations, and Training/Internships in Academic or Extracurricular Activities in year 2023	200+
5	No. of Research Publications/patents/etc. by Students (UG/PG/PhD) in year 2023	8+
6	No. of Student Cleared SAP	50+



Student Achievements

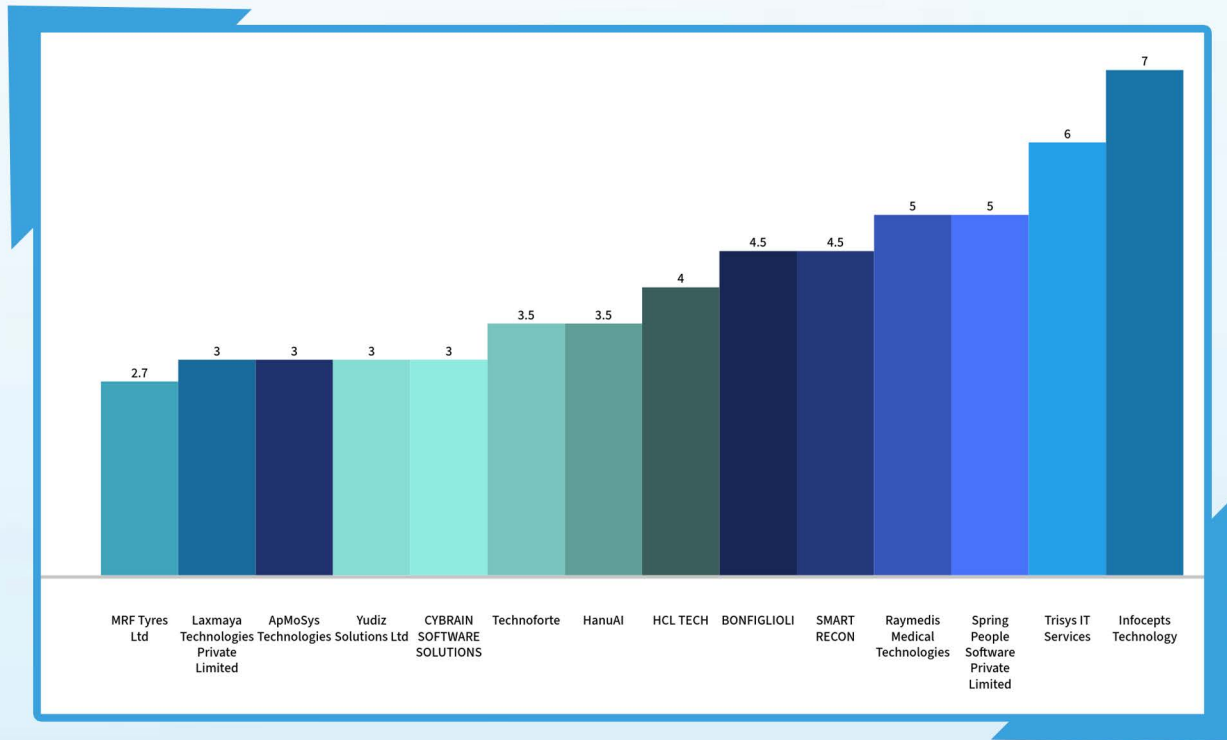
Jan - Dec 2025

GATE-2025 Qualified Students

Sl. No.	Name of the Student	Year / Admission Batch
1	GOPALKRUSHNA SAHOO	3rd / 2022-2026
2	DEBDATTA DASH	3rd / 2022-2026
3	VINAYAK ROUT	4th/ 2021-2025
4	PURNIMA PRUSTY	4th/ 2021-2025
5	NALINI PRASAD DASH	4th/ 2021-2025
6	NALA SAI PRASAD	3rd / 2022-2026
7	T JAGRUTI VERMA	3rd / 2022-2026
8	ABHIJIT RAY	3rd / 2022-2026



Placement Records



Placement Records

The Computer Science and Engineering (CSE) Department has achieved commendable placement results for the academic year 2024–2025. A total of 26 students were successfully placed in reputed companies across various sectors. The highest package offered was **7 LPA**, secured at Infocepts Technology, while several students received offers in the range of **3 LPA to 6 LPA**, reflecting consistent industry demand for CSE graduates. Specifically, 9 students were placed in the **3–4 LPA** range, 8 students in the **4–5 LPA** range, and 6 students in the **5–6 LPA** range, along with top offers above **6 LPA**. Leading recruiters included **HCL Tech, Bonfiglioli, Smart Recon, Raymedis Medical Technologies, Spring People Software Pvt. Ltd., Trisys IT Services, and others**. These placement outcomes highlight the department's strong academic foundation, industry-relevant training, and continuous efforts to enhance student employability. The CSE department remains committed to achieving even higher placement rates and better opportunities for future graduates.

Annual Sports

ARENA 2K25



Arena 2K25, the Annual Sports Meet of Parala Maharaja Engineering College (PMEC), was celebrated with great enthusiasm, competitive spirit, and vibrant energy across the campus. The event brought together students from all departments to showcase their athletic talent, teamwork, and sportsmanship.

The Department of Computer Science & Engineering (CSE) emerged as the Overall Champion of Arena 2K25, marking a proud and memorable achievement for the department. Our students delivered outstanding performances across multiple events. The Boys and Girls Kho-Kho teams displayed exceptional coordination and determination, securing top positions. In Kabaddi, both teams demonstrated strength, strategy, and resilience, dominating the competition. The department also excelled in Running events, where our athletes showcased remarkable speed, stamina, and dedication, contributing significantly to the championship title.



This remarkable victory reflects the unity, hard work, and sporting excellence of the CSE students. Arena 2K25 not only celebrated athletic achievements but also strengthened camaraderie and team spirit within the department.

Research & **Development**



Research with Global Collaborations

Research with global collaborations section

- Mishra, K., Ghugar, U., Rajareddy, G., Sahoo, K., Bhoi, S., Bhuyan, M., & Gandomi, A. (2025). Predicting diabetes with federated learning: A digital twin and medical fog-based iot framework. *ACM Transactions on Internet Technology*
- Mishra, K., Majhi, S. K., Sahoo, K. S., Bhoi, S. K., Bhuyan, M., & Gandomi, A. H. (2024). Collaborative Cloud Resource Management and Task Consolidation Using JAYA Variants. *IEEE Transactions on Network and Service Management*.
- Panigrahi, N., Patro, S. G. K., Kumar, R., Omar, M., Ngan, T. T., Giang, N. L., ... & Thang, N. T. (2023). Groundwater quality analysis and drinkability prediction using artificial intelligence. *Earth Science Informatics*, 16(2), 1701-1725.
- Behera, S. R., Panigrahi, N., Bhoi, S. K., Bilal, M., Sahoo, K. S., & Kwak, D. (2023). A distributed fuzzy optimal decision making strategy for task offloading in edge computing environment. *IEEE Access*, 11, 33189-33204.
- Jena, K. K., Bhoi, S. K., Mohapatra, D., Mallick, C., Sahoo, K. S., & Nayyar, A. (2023). A fuzzy rule based machine intelligence model for cherry red spot disease detection of human eyes in IoMT. *Wireless networks*, 29(1), 247-265.

Some Few International Conferences (Top Tier)

- Bhoi, S. K., Obaidat, M. S., Puthal, D., Singh, M., & Hsiao, K. F. (2018, December). Software defined network based fault detection in industrial wireless sensor networks. In *2018 IEEE Global Communications Conference (IEEE GLOBECOM)*, Abu Dhabi, UAE, (pp. 1-6). IEEE.
- Mohapatra D, Ranjan Patra M. A graph based approach for privacy preservation of citizen data in e-governance applications. In *Proceedings of the 20th Annual International Conference on Digital Government Research 2019 Jun 18* (pp. 433-438), Dubai, MBRSG, Dubai, UAE.

SL. No.	Activity of CSE Dept.	Status/Numbers
1	No. of Journals (SCIE/ESCI/Scopus)	100+
2	No. of International Conferences (Scopus)	50+
3	No. of Research Funded Projects (Govt of India/ Odisha/ any others org.)	05
4	No. of Students pursuing Ph.D under Supervisors	10+
5	No. of Patents Published/ Applied/ Granted	04
6	Students Research papers	20+



Funded

Research Projects and Patents

Funded Research Projects

SL. No.	Area	Funding Organization	Status	Total
1	Smart Irrigation	MHRD, Govt of India	Completed	Dr. Sourav Bhoi
2	Complex Networking	OURIP, Govt. of Odisha	Completed	Dr. Debasis Mohapatra
3	Robotics Club R&D Development	SPICS, AICTE, Govt of India	Completed	Dr. Sourav Kumar Bhoi
4	Web Development	Apay Technology and Solution	Completed	Dr. Kalyan Kumar Jena & Dr. Sourav Kumar Bhoi.
5	Web Development	Apay Technology and Solution	Completed	Dr. Sourav Kumar Bhoi & Dr. Kalyan Kumar Jena

Patent

SL. No.	Title of Project	Patent Office	Application No. & Date	Published/Granted	Contributors
1	Method And System for Managing Resource Scarcity in Cloud-Fog Based Internet of Things (IoT) Applications (Networking)	India	202231015642	Granted	- Dr. Sourav Kumar Bhoi - Dr. Kalyan Kumar jena - Dr. Debasis Mohapatra - et al
2	Method And System for Secured Device-To-Device Communication in Peer-to-Peer Network (Netwrking)	India	202231015642	Granted	- Dr. Sourav Kumar Bhoi - Dr. Kalyan Kumar jena - Dr. Debasis Mohapatra - et al
3	Vehicle Bottom Cleaning Device (Robotics)	India	202231015642	Granted	- Dr. Sourav Kumar Bhoi - Dr. Kalyan Kumar jena - et al
4	IoT Based Elbow Crutch with Quadripod Base	India	202231015642	Granted	- Dr. Sourav Kumar Bhoi - Dr. Kalyan Kumar jena - et al



Research Publications

Key Student Research Papers

- Pilli, Neelima, Debasis Mohapatra, and Shiva Shankar Reddy. "Review on meta-heuristic algorithm-based priority-aware computation offloading in edge computing system." *Journal of The Institution of Engineers (India): Series B* 106.4 (2025): 1261-1286.
- Nibedita, S., Jena, K. K., & Bhoi, S. K. (2025, October). A Nonce Challenge Based Authentication Scheme for Secured Task Offloading in Edge. In *Intelligent Systems: Proceedings of 5th International Conference on Machine Learning, IoT and Big Data (ICMIB 2025)*, Volume 2 (Vol. 2, p. 59). Springer Nature.
- Roy, A. K., Jena, K. K., & Mohapatra, D. (2023, December). Water Pumping Requirement Prediction in Irrigation System Using Internet of Things-Assisted Machine Intelligence-Based Approach. In *International Conference on Advances in Computational Intelligence and Informatics* (pp. 131-138). Singapore: Springer Nature Singapore
- Sing, R., Bhoi, S. K., & Panigrahi, N. (2023, December). A Fault-Tolerant Load Balancing Approach Using Whale Optimization Algorithm for Cloud-Fog Based IoT Applications. In *2023 OITS International Conference on Information Technology (OCIT)* (pp. 231-236). IEEE.
- Behera, S. R., Panigrahi, N., & Bhoi, S. K. (2023, December). A Novel Dynamic D2D-assisted Offloading Decision Making in Multi-user Edge Computing Environment. In *2023 OITS International Conference on Information Technology (OCIT)* (pp. 144-149). IEEE
- Mohapatra, D., & Dash, B. (2024). Three-level scoring based on community and decomposition structures to identify influential spreaders in a social network. *International Journal of Data Science and Analytics*, 1-14.
- Mohapatra, D., Singh, S., Pradhan, R., & Behera, S. R. (2023, December). Integrating structural features for link prediction in directed social network using supervised machine learning with SHapley Additive exPlanations. In *2023 OITS International Conference on Information Technology (OCIT)* (pp. 468-472). IEEE.
- Panigrahi, N., Ayus, I., & Jena, O. P. (2021). An expert system-based clinical decision support system for Hepatitis B prediction & diagnosis. *Machine Learning for Healthcare Applications*, 57-75.
- Ayus, I., & Panigrahi, N. (2021). A Decision Support System Using Rule-Based Expert System for COVID-19 Prediction and Diagnosis. In *Applications of Artificial Intelligence in COVID-19* (pp. 119-140). Springer, Singapore.
- Jena, K. K., Bhoi, S. K., Mallick, C., Jena, S. R., Kumar, R., Long, H. V., & Son, N. T. K. (2022). Neural model based collaborative filtering for movie recommendation system. *International Journal of Information Technology*, 1-11.
- Apoorva, A., Mishra, G. K., Sahoo, R. R., Bhoi, S. K., & Mallick, C. (2021). Deep Learning-Based Ship Detection in Remote Sensing Imagery Using TensorFlow. In *Advances in Machine Learning and Computational Intelligence* (pp. 165-177). Springer, Singapore.
- Jena, K. K., Bhoi, S. K., Behera, B. D., Panda, S., Sahu, B., & Sahu, R. (2019, December). A trust based false message detection model for multi-unmanned aerial vehicle network. In *2019 Third International conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud)(I-SMAC)* (pp. 324-329). IEEE.
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Some Areas of **Research & Development**

- 5g/6G Technology
- LLM
- Metaverse
- Digital Twin
- AI assisted Healthcare Technology
- AI enabled IoT Technology
- Fog computing and Edge Computing
- Blockchain
- Deep Learning and Machine Analytics
- Intelligent Systems and Robotics
- Optimization Engineering
- Sensor Networks
- AI enabled Technologies
- Cryptography and Network Security
- Cyber Security
- Video/Audio/Signal Processing
- Fault/Trust Computing
- Social Network Privacy
- Software Defined Networking
- Natural Language Processing
- Sentiment Analysis

Additional **Facilities**



Other Facilities

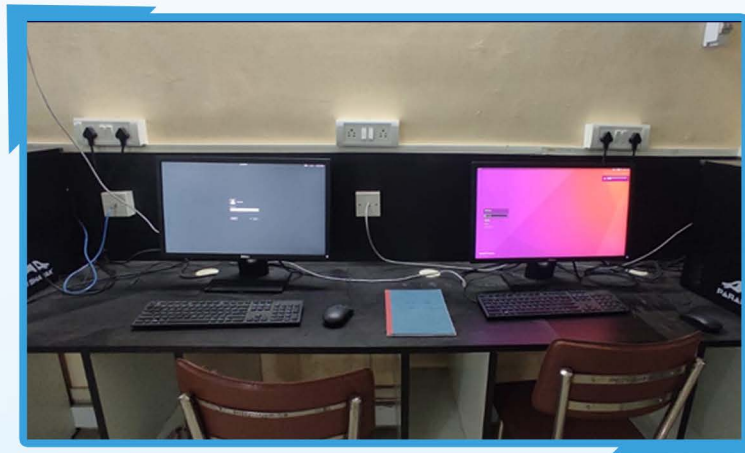


Center of Excellence – High Performance Computing Lab

The Center of Excellence: High Performance Computing (HPC) at Parala Maharaja Engineering College stands as a symbol of innovation, research, and technological growth within the CSE Department. Designed to support advanced computing needs, this facility provides students with exposure to high-end computational environments that go beyond regular classroom learning.

The HPC center plays a vital role in encouraging research, project development, simulations, and problem-solving at scale, enabling students to work on real-world challenges in areas like data processing, algorithms, and system optimization. It reflects our department's commitment to bridging the gap between theoretical knowledge and practical application.

Other Facilities



PARALA MAHARAJA ENGINEERING COLLEGE
CoE-HPC

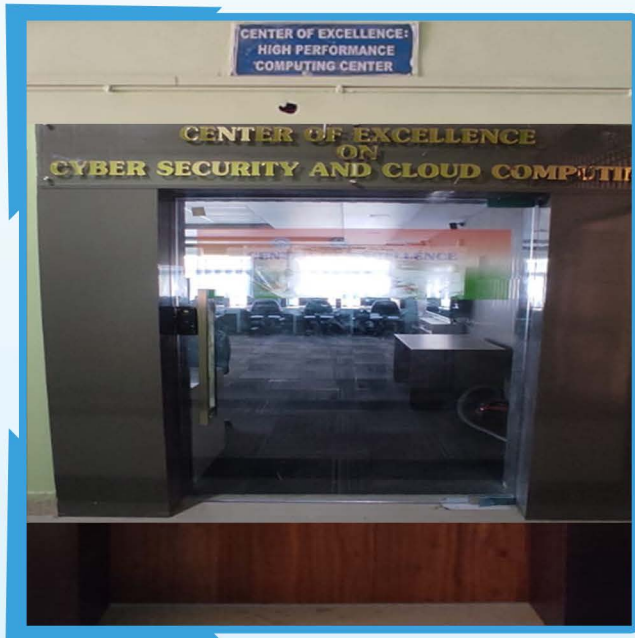
PARAM SHAVAK AT A GLANCE
Hardware Specification

- ▣ **PARAM SHAVAK DLPRODUCT**
 - Latest Intel multicore processor-Dual Socket Intel Broadwell processor with 14 cores each
 - 96GB RAM- to accommodate large dataset.
 - 16TB of Secondary Storage- with RAID5 configured
 - 1KWatt Power Supply
 - Ethernet Network Interconnect
- ▣ **ACCELERATOR**
 - One number of Nvidia P5000(In DLGPU SYSTEM) and GP100 (PARAM Shavak HPC System) accelerator cards
 - Nvidia Pascal architecture based co-processing technologies
 - DLGPU software environment (with Deep Learning GPU SDK and training system).
- ▣ **PEAK COMPUTING POWER**
 - Over 25TF Single Precision

Center of Excellence (High Performance Computing Lab-Param Shavak)

The PARAM Shavak is a High-Performance Computer available in the High Performance Computing Lab at Parala Maharaja Engineering College under the CSE Department. This advanced facility supports high-end computation and research activities. Equipped with GPU-enabled systems and powerful multi-core processors, the lab enables work in areas such as parallel computing, deep learning, data-intensive applications, and scientific simulations. It provides students with exposure to industry-grade HPC infrastructure, fostering research-oriented learning and technical excellence.

Other Facilities



Center of Excellence (Cyber Security and Cloud Computing)

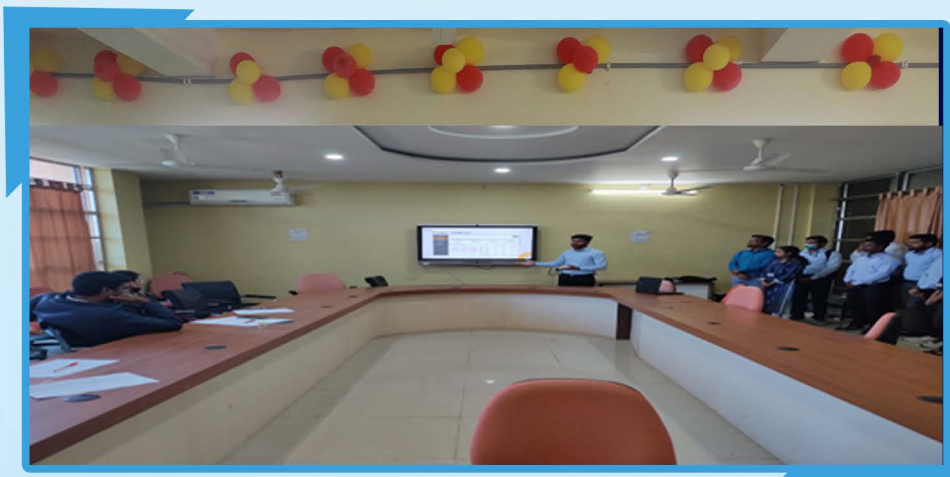
The Center of Excellence in Cyber Security and Cloud Computing of the CSE Department, Parala Maharaja Engineering College, focuses on building skills in secure systems, cloud platforms, and modern IT infrastructure. The center provides hands-on learning opportunities in areas such as network security, ethical practices, cloud services, and data protection, preparing students to meet current industry and security challenges.

Other Facilities

Seminar Hall



Conference Hall



Editorial Board

Faculty Members



**Dr. Debasis
Mohapatra**



**Dr. Sourav
Kumar Bhoi**



**Mr. Kisan
Prayag Patro**

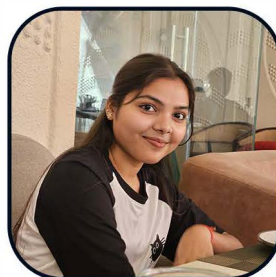


Ms. M Soujanya

Student Members



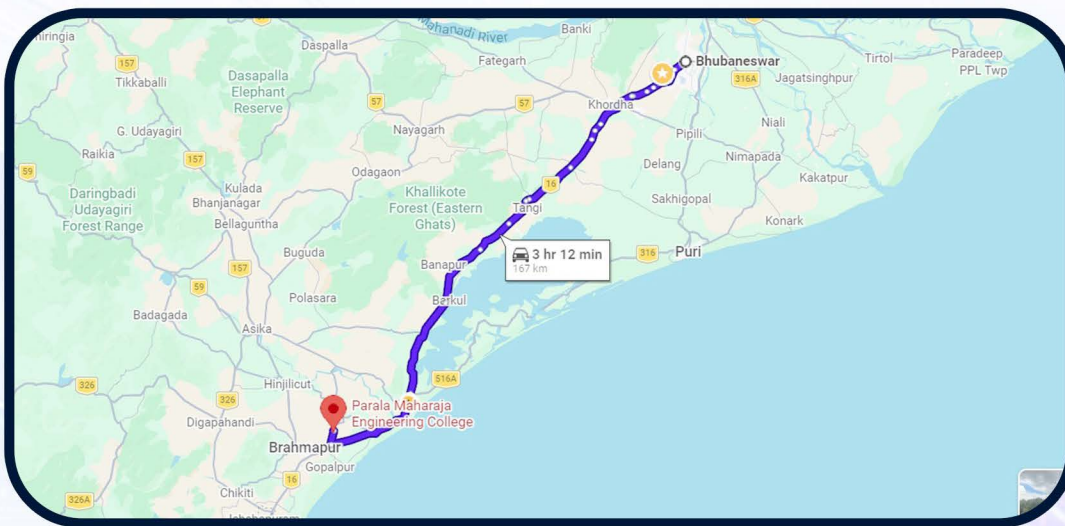
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Marndi**
(3rd Year, CSE)



**Kshitisa
Meher**
(2nd Year, CSE)



**Swayam
Siddha Swain**
(1st Year, CSE)



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Department of Computer Science & Engineering

**Parala Maharaja Engineering College
Sitallapalli, Berhampur - 761003, India**

