

RIDDHIMAN MOULICK

[📧] [✉] [🌐] [in]

EDUCATION

Indian Institute of Technology, Kharagpur CGPA: 9.08/10.00	2020 – 2024
Major: Electrical Engineering Minor: Computer Science & Engineering Micro: Artificial Intelligence	
City International School, Pune Grade: 96.8% Higher Secondary (CBSE)	2018 – 2020
The Bishop's School, Undri, Pune Grade: 98.4% Secondary School (ICSE)	2006 – 2018

WORK EXPERIENCE

Software Developer Oracle IDC, Hyderabad	Jul' 2024 – Present
<ul style="list-style-type: none">• Built an agentic service for pipeline failure detection and resolution [Python, Java, OCI, Oracle 23ai DB] Automated the resolution of frequently occurring failures in the build-deploy-test-run cycle for Oracle Fusion applications while building and utilizing a continually incrementing knowledge base.• Devised a custom controllable cloud-native CI/CD pipeline framework [Java, REST, Kubernetes, Jenkins] Designed microservices and Oracle-Kubernetes Engine (OKE) hosted resources to replace legacy Jenkins infrastructure, to enhance resource efficiency and provide granular control over job allocation.• Optimized execution speed of long-running regression (LRG) tests [Java, Preact, Podman, Jenkins] Introduced parallelization of LRG tests in monolith applications considering test inter-dependencies.• Designed a visual analytics tool for infrastructure monitoring [Python, Oracle APEX, Shell Scripting] Developed and analyzed metrics to track and maintain optimal load distribution across 1,500+ cloud resources.	
Student Researcher CVIR & CNeRG, IIT Kharagpur	Aug' 2023 – Jun' 2024
<i>Transferable Knowledge Systems Prof. Abir Das, Prof. Saptarshi Ghosh (CSE, IIT Kharagpur)</i> <ul style="list-style-type: none">• Developed an on-the-fly prompting technique with language attribute similarity computation, addressing catastrophic forgetting in class-incremental continual learning while also cutting parameter overhead by 50%.• Designed a fully source-free, actively controlled student-teacher based knowledge refinement mechanism to perform test-time adaptation with continually changing target domain distributions.	
Applications Developer Intern Oracle IDC, Hyderabad	May 2023 – Jul' 2023
<ul style="list-style-type: none">• Context-Aware Assistant for Personalized User Support [Python, Oracle Digital Assistant, NodeJS] Enhanced <i>Becky</i> digital assistant with a user action recommendation feature that proactively initiates contextual conversations and suggests actions based on real-time analysis of user activity and system processes.	

PUBLICATIONS/PREPRINTS

- ⇒ [Convolutional Prompting meets Language Models for Continual Learning](#) [📄] | In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2024
Anurag Roy, Riddhiman Moulick, Vinay K. Verma, Saptarshi Ghosh, Abir Das
- ⇒ [Source-Free Controlled Adaptation of Teachers for Continual Test-Time Adaptation](#) | Under Review

SELECTED PROJECTS

- ⇒ [EquiStrat](#) [📄] - Computing Dominant Strategies and Nash Equilibria in Normal Form Games
- ⇒ [RLNav](#) [📄] - Using Policy Evaluation/Iteration, and Monte-Carlo Algorithms for stochastic navigation

SKILLS

- **Programming Languages:** Python, C, C++, Java, PL/SQL, JavaScript, Verilog, Assembly, \LaTeX
- **Tools & Libraries:** PyTorch, Tensorflow, OpenCV, Docker/Podman, Jenkins, cURL, Git, Matlab, Stateflow

AWARDS AND ACHIEVEMENTS

- Nominated to receive the **Systems Award, 2024** for the best thesis amongst all graduating students in the department
- Awarded the **Chanakya Graduate Fellowship, 2024** by AI4ICPS, IIT Kharagpur
- Achieved a joint **All India Rank 6** and city rank 1 in ICSE Class X with an aggregate score of **98.4%**