

# Taleef Tamsal

[ttamsal@purdue.edu](mailto:ttamsal@purdue.edu) | [linkedin.com/in/ttamsal/](https://www.linkedin.com/in/ttamsal/) | <https://github.com/Taleef7>

## SUMMARY

Computer Science graduate student with software development, machine learning, frontend, backend, and full-stack development expertise. Skilled in web application development, SDLC, data structures, data science, AI/ML and DL models, operating systems, computer architecture, ETL, cloud and cloud computing, and delivering data-driven insights and solutions. Proven team player with a track record in enhancing workflows, being collaborative, implementing best practices, cloud infrastructure, user engagement and product design, and leveraging agile methodologies to drive impactful results

## EDUCATION

### Purdue University

*Master of Science in Computer Science*

Indiana, USA

Aug. 2024 – May 2026 (Expected)

### Lahore University of Management Sciences

*Bachelor of Science in Computer Science*

Lahore, Pakistan

Aug. 2020 – May 2024

## EXPERIENCE

### Digital Channel and Partnership Intern

July. 2023 – Aug. 2023

*PMCL-Jazz*

*Islamabad, Pakistan*

- Managed product lifecycle for push notification features, ideation to implementation by leveraging A/B testing and data-driven insights to enhance user engagement by 20% and retention by 15%
- Collaborated with cross-functional teams, including UI and UX designers, product, data, and DevOps, to iterate on app usability enhancements, boosting user experience ratings by 30%

### Undergraduate Teaching Assistant

August 2022 – December 2023

*Lahore University of Management Sciences*

*Lahore, Pakistan*

- Curated and refined comprehensive assignments, quizzes, and learning materials for CS courses, boosting student participation and improving average grades through problem-solving
- Facilitated weekly office hours, conducted code and algorithms reviews, and provided tailored one-on-one guidance to over 50 students, helping them solve complex problems, and fostering a community of learning and mentorship

## PROJECTS

### Online News Characterization | *Python, LLMs, Hugging Face, Scikit-learn*

September 2024 – Present

- Developed and fine-tuned deep learning Natural Language Processing (NLP) and ML (Logistic Regression, Decision Trees, XGBoost) and DL model pipelines, utilizing BERT and XLM-R in Jupyter Notebooks, to extract narratives, transform and analyze raw data, perform entity framing, and classification of disinformation in news articles
- Optimized model performance by implementing advanced statistical analysis, data transformation, cross-validation, and hyperparameter tuning, demonstrating expertise in processing and analyzing multilingual datasets

### Biometric Attendance System | *MongoDB, Express, React, Node.js, Git*

January 2024 – May 2024

- Architected and implemented a full-stack MERN web application for employee attendance tracking using biometric verification, reducing errors by 90% and streamlining administrative workflows
- Delivered the project using agile methodologies, including Scrum and Kanban, while integrating API development, performance optimization, and rigorous testing

### Attendance Tracker 4.0 | *Firebase, React, Material-UI, Node.js, Sass*

September 2024 – December 2024

- Built an end-to-end QR code-based system for managing student attendance, automating recordkeeping, ensuring CI/CD, code reliability, automation, testing, and generating detailed reports using the NoSQL Firebase Database
- Designed a dynamic and responsive interface with React and Material-UI, practising version control, creating unit tests, and incorporating features such as QR code generation and email distribution to streamline workflows and improve efficiency

## TECHNICAL SKILLS

**Languages:** Python, C, C++, C#, Java, JavaScript, TypeScript, SQL, PowerShell, Bash, Kotlin, R, Haskell, MATLAB

**Frameworks & Libraries:** Pandas, NumPy, Angular, ReactJS, Node.js, TensorFlow, PyTorch, Matplotlib, Scikit-learn

**Developer Tools:** Jira, Tableau, Git, Kafka, Docker, Databricks, AWS, Kubernetes, Apache Spark, Linux, Azure, Excel, Power BI, Scala, GCP, Postman, Sass, Keras, Selenium, Cypress

**Soft Skills:** Problem-Solving, Critical Thinking, Collaboration, Communication Skills, Compliance, Teamwork

**Certifications:** freeCodeCamp Responsive Web Design, Google Data Analytics, IBM Cybersecurity Analyst, Meta Front-End Development, DeepLearning.AI Data Engineering