**Education**

**National University of Computer and Emerging Sciences**, Islamabad, Pakistan *[8/2019 - 06/2023]*

* Pursued a Bachelor of Sciences (BS) in Computer Science

**Work Experience**

**Research Assistant**, BIRL, LUMS, Lahore, Pakistan *[10/2024 - Present]*

* Work on applying AI methodologies in Proteomics centered around Post-Translational Modifications (PTMs)
* Designed PRECEPTRON-PTMKB, a web server for prediction and analysis of Per-Residue PTM for proteins

**AI Research Engineer**, CureMD, Lahore, Pakistan *[07/2023 - Present]*

* **AI Research Engineer** *[07/2024 - Present]*
  + Research and development in multi-agent systems and deep learning methodologies including Language and Vision models
  + Designed hardware for AI-centric technologies including Nvidia and Apple Metal
* **Associate AI Research Engineer**, CureMD, Lahore, Pakistan *[01/2024 - 06/2024]*
  + Developed tools for extracting cancer phenotypes from medical notes
  + Presented tools in AIME AI in Oncology Workshop 2024
* **Software Trainee Engineer (AI)**, CureMD, Lahore, Pakistan *[07/2023 - 12/2023]*
  + Researched and developed clinical software utilizing Deep Learning and Unsupervised Machine Learning

**Cloud Computing Intern**, NUCES, Islamabad, Pakistan *[04/2022 - 07/2022]*

* Built a Final Year Project Automation Management System for the School of Computing faculty and staff
* Supervised and collaborated with a dedicated team to document, design, test, and deploy the system
* Reduced work time for faculty and staff members by half

**Teaching Experience**

**Lab Demonstrator**, NUCES, Islamabad, Pakistan *[07/2022 - 06/2023]*

* Aided lab instructors in teaching and evaluating students
* Supported students in technical or

**Teaching Assistant**, NUCES, Islamabad, Pakistan *[07/2021 - 06/2023]*

* Taught students and handled queries alongside faculty member supervisors
* Designed assessments and rubrics for evaluations
* Represented in Object-Oriented Programming, Data Structures, and Design and Analysis of Algorithms

**Volunteer Experience**

**Research Secretary**, IEEE Computer Society, NUCES, Islamabad, Pakistan *[07/2022 - 06/2023]*

* Supervised research-related conferences and seminars on Quantum Computing and others
* Collaborated and hosted in IEEE INMIC 2022

**Team R&D**, SASR, NUCES, Islamabad, Pakistan *[10/2021 - 05/2022]*

* Operated with a team to focus on academic research and come up with novel solutions to real-world problems

**Officer Team Buddy Programme**, NUCS, NUCES, Islamabad, Pakistan *[01/2021 - 06/2021]*

* Taught and encouraged juniors troubled with programming

**Academic Projects**

* **GoogleTalk:** A Chromium-based extension backed up with a server that automates the usage of Google applications through voice recognition and natural language processing techniques
  + Made accessible to physically-abled users
  + Tools used: Flask, Google REST APIs, SpaCy, Docker, Whisper
* **Novozymes Enzymes Thermostability Prediction:** Find the optimal melting temperature of a trial enzyme by applying Data Science methodologies to the provided protein sequences
  + Spearmann’s correlation of ~0.5 achieved
  + Tools used: Jupyter Notebook, Scikit-Learn, AlphaFold, DeepDDG, PyRosetta
* **TORCS Self-Driving Car:** Designed an artificial neural network to make a car drive intelligently based on the features captured through hundreds of hours of manual driving
  + Tools used: Python, Scikit-Learn, PyTorch

**Technical Skills**

* **Programming Language:** Python, C++, C, Java, HTML, CSS, JavaScript
* **Integrated Development Environment:** Microsoft Visual Studio, Visual Studio Code, Anaconda JupyterLab, Eclipse, PyCharm

**Honors and Awards**

* **2nd Position in CureMD AI BootCamp** (2024)
* **BS with Honors - Cum Laude** (2023)
* **Dean’s List Award** (2020, 2021, 2022, 2023)

**Additional Information**

**Languages:**

* **Urdu** - Native
* **English** - Full professional proficiency
* **German** - Limited working proficiency

**Interests:** reading books, literature survey, playing sports and video games, cooking