## JAMIL UR RAHMAN

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#### **EDUCATION**

**Bahria University** 

Islamabad, Pakistan

Master's in Data Sciences Sep 2022 – Sep 2024

Relevant Coursework: Machine Learning, Deep Learning, Pattern Recognition, Big Data Analysis, NLP.

University of Agriculture, Peshawar

Peshawar, Pakistan

Bachelor's in Computer Science Sep 2017 - Sep 2021

Relevant Coursework: Electronics, Software Engineering, Operating Systems, Algorithms, Artificial Intelligence

#### **WORK EXPERIENCE**

**SMART FORUM** 

Islamabad, Pakistan

Software Engineer

Oct 2023 – Present

- Leading React.js development across multiple client-facing platforms.
- Refactored legacy codebases, improving maintainability and performance by 80%.
- Collaborated with cross-functional teams to deliver scalable solutions.

Key Technologies: React.js, REST APIs, Git, Code Optimization

Junior Software Engineer

Oct 2021 – Oct 2023

- Developed front-end modules using React.js and optimized UI performance.
- Participated in code reviews and debugging processes, ensuring production quality.
- Earned "Employee of the Month" in July 2023 for outstanding performance.

Key Skills: CSS, JavaScript, Unit Testing, Agile Teamwork

**3G TECHNOLOGIES** 

Islamabad, Pakistan

Sep 2021 – Oct 2021

Engineering Intern

- Built and tested web components using React.js.
- Worked under senior engineers to resolve critical frontend bugs.

Key Tools: CSS, JavaScript, Debugging

## **PROJECTS**

# Research Project: Ensemble Deep Learning for Precise Thalassemia Classification in Blood Smear Images

Role: Lead Researcher | Tech Stack: Python, TensorFlow, ResNet50, VGG16, MobileNetV2

- Designed and implemented an ensemble of CNN models (ResNet50, VGG16, MobileNetV2) for classifying beta-thalassemia from blood smear images.
- Achieved a 75.61% validation accuracy using ensemble learning, outperforming all individual models in both precision and stability.
- Worked on a dataset of 7,108 erythrocyte images across 9 classes, focusing on clinical relevance and robustness in low-resource environments.
- Conducted deep error analysis via confusion matrices and classification reports to reduce false positives in difficult cases like teardrop and elliptocyte cells.
- Highlighted for potential real-world deployment to assist in early thalassemia diagnosis in rural clinical setups.

Device Identification Registration and Blocking System (DIRBS)—Pakistan Telecommunication Authority

Present Role: Frontend Developer | Tech Stack: React.js, Redux, REST API, Ant Design

Link: https://dirbs.pta.gov.pk

- Contributed to the development and enhancement of the PTA's DIRBS portal used for IMEI registration and mobile device verification across Pakistan.
- Implemented responsive UI components using React.js and Ant Design, improving user flow and accessibility for over a million monthly users.
- Integrated and tested 20+ REST API endpoints for device verification and real-time validation, reducing data processing latency by 40% and improving backend reliability across high-traffic user sessions.

# Research Project: Intelligent Legal Information System—AI-Powered Legal Chatbot for Penal Code Predictions Role: Researcher & Developer | Tech Stack: Python, NLP, AI, Rule-based Systems

- Developed a legal chatbot capable of predicting relevant Pakistani penal code sections based on user input about crimes.
- Applied NLP techniques to interpret natural language crime descriptions and map them to judicial rulings and legal statutes.
- Demonstrated the ability of AI to learn and understand legal language better than traditional rule-based systems.
- Project aimed at improving accessibility to legal information and streamlining legal research for both professionals and citizens.

## **ADDITIONAL**

## Technical Skills:

- Languages: JavaScript, TypeScript, Python, Java, HTML, CSS, SQL
- Frameworks/Libraries: React.js, Redux, TensorFlow, Pandas, NumPy, VGG16, ResNet50, MobileNetV2, Keras
- Tools: Git, GitHub, VS Code, Postman, JIRA, Heroku, Figma, Tableau, Microsoft Power BI, Google Data Studio, Oracle Cloud
- Platforms: Microsoft 365 Copilot, Microsoft Azure, Google Cloud Platform, Oracle Cloud Infrastructure
- Concepts: Agile, Scrum, CI/CD, Data Analysis, Business Intelligence (BI), Data Visualization, DevOps, NLP, Deep Learning, Ensemble Learning, Generative AI, Ethical AI, Cloud Computing, Legal NLP Applications

Certifications & Training: Advanced Python Programming—Coursera, Deep Learning Specialization—Coursera, Advanced Python Programming — Coursera Deep Learning Specialization — Coursera, Oracle Cloud Infrastructure 2023 AI Certified Foundations Associate — Oracle (Credential ID: 312875443OCI23AIFCA), Introduction to Large Language Models — Simplilearn (Credential ID: 7449596), DWH & BI Workshop — Dice Analytics (Power BI, Tableau, Teradata, SQL), Data Visualization with Power BI — Great Learning Academy, DevOps Foundations — LinkedIn Learning, Introduction to Data Studio — Google (Issued Sep 2022, Expires Sep 2025), JIRA Software — LinkedIn Learning, Additional Micro-Certifications & Skill Boosters, Work Smarter, Think Sharper, Live Better: 15 Tips for Igniting Your Potential, Writing with Impact, Career Essentials in GitHub (Professional Certificate), Practical GitHub: Code Search, Actions, Project Management & Collaboration, Train Your Brain to Unwind Stress and Anxiety Habits. Career Essentials in Generative AI — Microsoft & LinkedIn, Streamlining Work with Microsoft Copilot, Learning Microsoft 365 Copilot, Visualizing Your Leadership Journey, Ethics in the Age of Generative AI, Generative AI: The Evolution of Thoughtful Online Search, Generative AI, Tips to Build a Positive Mindset, Nano Tips to Foster a Growth Mindset & Mental Agility — with Shadé Zahrai, Creating a Positive and Healthy Environment, Balancing Work & Life, Ethical, Human-Centered AI Design, Glossary of Terms for Ethical AI, Figma Essential Training: The Basics, Top 10 Skills for FinTech Analytics, Best Language for Data Science, Scrum: The Basics, Introduction to AI (2023), Agile Testing, React Hooks, Learning JIRA Software, DevOps Foundations: Continuous Delivery & Continuous Integration, React: Building Large Apps, Building Modern Projects with React (2020), MySQL Installation and Configuration (2019)