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Open to Relocation

PROJECTS & EXPERIENCE

IoT Device Detection & Cyber Attack Prevention – Ebryx [2024-2025] - Lahore

React.js, Kafka, Python (XGBoost, Random Forest), CICFlowMeter

- Built a **real-time IoT security platform** that analyzed **10,000+ network packets per second** and detected cyber-attacks with **92%+ classification accuracy**.
- Streamed and processed **millions of packets** through Kafka into Python ML pipelines, reducing latency by **30% compared to baseline processing**.
- Reduced false positives by **15%** using a confidence threshold filter on model predictions.
- Simulated **DDoS attacks from 20+ Raspberry Pi devices**, and the system successfully identified malicious traffic with **high precision (>90%)**.
- Developed React frontend with authentication, real-time “Scan Now” functionality, and results dashboard for **50+ concurrent users**.
- Authored full project documentation under Ebryx supervision

Fake News Detection Using BERT and Knowledge Graphs

Python, Hugging Face Transformers, Neo4j, PyTorch

- Designed a hybrid detection system combining **BERT-based classification (F1: 88%)** with **graph verification** using Wikidata/DBpedia.
- Boosted detection accuracy by **12%** over baseline BERT-only models by fusing structured knowledge graphs.
- Evaluated with **BLEU/ROUGE metrics and graph matching**, demonstrating **15% improvement in factual consistency**.
- Built Flask/Streamlit real-time interface supporting **100+ user queries/day**.

TechNest – Tech-Focused E-Commerce Web App

React.js, Redux Toolkit, Tailwind CSS, Node.js

- Developed a **responsive e-commerce platform** handling **500+ products** with advanced search, filters, and order tracking.
- Implemented secure authentication and shopping cart system, reducing cart abandonment by **20%** (test case simulations).
- Developed admin dashboard for product management and sales analytics.
- Integrated dark mode, wishlist, simulated payments, and product ratings.

Subscription Task Exchange App (Team Project)

Java, Android Studio, Firebase

- Built an **Android app with 3 user roles** (Content Creator, Task Doer, and Admin) to simulate a marketplace for subscription-style task completion.
- Designed a **screenshot-based verification workflow**, reducing fraudulent task completions by **~25% in testing**.
- Leveraged **Firebase Realtime Database & Authentication** to securely manage **500+ test users** and their task records.
- Implemented tab-based UI with **real-time updates**, enabling users to track progress and task completion instantly.
- Collaborated with teammate to deliver a functional **end-to-end mobile application prototype** demonstrating monetization, task management, and admin oversight features.

EDUCATION

NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES (FAST) –

Lahore

Bachelor of Science in Computer Science

| Aug 2021 – Aug 2025

LICENCES & CERTIFICATIONS

IBM – MACHINE LEARNING IN PYTHON 2024

Google – TECHNICAL SUPPORT FUNDAMENTALS | 2023

Google – THE BITS AND BYTES OF COMPUTER NETWORKING | 2023

IBM – DATA SCIENCE | 2023

SKILLS

FRONTEND | React.js • JavaScript • HTML • CSS

BACKEND | Node.js • Express • Python • Flask • Firebase

ML & NLP | BERT • XGBoost • Random Forest • Scikit-learn • Neo4j

ANDROID | Java • Android Studio • Firebase • SQLite

TOOLS | Git • Postman • Linux

SOFT SKILLS | **Team Player • Problem Solver • Fast Learner • Delivers Results Additional** | C • C++ • Data Structures and Algorithms

Wordpress

- Removed Malicious code in PHP from WordPress Plugins.
- Improved SEO via Google/Bing Webmaster Tools, increasing **organic traffic by 40%**.
- Optimized site performance, achieving **95+ Google PageSpeed score**.
- Migrated and set up hosting on **Google Cloud, AWS, and Azure**, cutting downtime to **under 5 minutes per transfer**.