# Krithika Kannan

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# TECHNICAL SKILLS

Languages: Python, Java, TypeScript, JavaScript, HTML/CSS, SQL (Postgres), C/C++

Frameworks: React, React Native, Node.js, Flask, FastAPI

Developer Tools: Git, VS Code, Visual Studio, PyCharm, Open Source

Libraries: pandas, NumPy, Matplotlib, TensorFlow, PyTorch

Cloud Technologies: AWS, Redis, Google Cloud, Firebase, Blockchain

AI: TensorFlow, PyTorch, Scikit-learn, OpenCV

Design Tools: Canva, Figma

## EXPERIENCE

## Financial Analysis and Innovation Intern

April 2025 - Present

Qatar Financial Centre Regulatory Authority

Doha, Qatar (Remote)

- Assisted in maintaining and enhancing core analytical platforms and data pipelines to support supervisory teams within the Supervision and Authorization division.
- Contributed to AI-driven research initiatives by exploring machine learning applications and innovative SupTech solutions for regulatory supervision.

# Marketing and Event Coordinator

Jan 2025 – Apr 2025

University of Waterloo Computer Science Club

 $Waterloo.\ ON$ 

- Managed digital marketing promotions for the club events, utilized React, JavaScript, and Next.js to design event landing pages, event sign-up, reminders, data gathering, and augment user engagement.
- Created visually appealing promotions with Figma, Canva, and Filmora to achieve maximum event branding.

## Teaching Assistant

July 2024 - Aug 2024

Devamatha CMI Public School, Thrissur

Thrissur, India

- Served as a Teaching Assistant for the Computer Science Professor of Grades 9 and 10.
- Delivered engaging lessons in Python and MySQL to build strong programming foundations.

#### Projects

#### **LAW-DER** | Next.js, Flask, Cohere, Redis, AWS

March 2025

- Architected a full-stack legal assistance platform integrating Cohere LLMs (Embed, Command A, Re-Rank) with ChromaDB-based vector search across four distinct legal corpora—case law, statutes, regulations, and precedents—for accurate, multilingual legal insights.
- Built a robust AI pipeline comprising a **Legal Assistant**, **Research Agent**, and **Verification Agent** to minimize hallucinations, ensure source credibility, and adapt responses to diverse legal jurisdictions.
- Deployed a scalable, responsive frontend with Next.js 14, React, TypeScript, Tailwind CSS, and optimized backend services via Flask, Redis, and AWS S3, enabling real-time legal document processing and equitable pro-bono lawyer matching.

### **DIGITAG** | Blockchain, Internet Computer Protocol (ICP), NFTs

Feb 2025

- Engineered NFT-based authentication on the **Internet Computer Protocol (ICP)** using Motoko smart contracts to immutably verify luxury item ownership and trace provenance on-chain.
- Implemented decentralized identity via **Internet Identity (II)** for secure, passwordless authentication and fraud prevention in high-value asset transactions.
- Built a fully decentralized resale platform with **ICP canisters** managing NFT minting, ownership transfers, and metadata storage; integrated with a React + Tailwind frontend for seamless user experience.

#### CHURNX | Predictive Modeling, Python, TensorFlow, NumPy, Scikit-learn, Data Analytics

Jan 2025

- Developed a machine learning pipeline using features from **Kaggle's Bank Churn Dataset** and simulated insurance data to predict customer churn in the banking and insurance sectors.
- Applied survival analysis to model customer retention over time and identify high-risk churn segments for proactive targeting.

#### EDUCATION