# Aditya Kaul

+91 99715 91478 | theadityakaul@gmail.com | linkedin.com/in/callmekaul | github.com/callmekaul

## SUMMARY

Integrations Developer with 2+ years of experience at a global enterprise, building robust data pipelines and scalable automation using Azure technologies. Backed by 7+ years of hands-on programming across multiple languages, and 4 years of continuous learning and application in AI/ML, including independent projects in image recognition, reinforcement learning and SaaS development. Passionate about solving real-world problems at scale using intelligent systems.

# TECHNICAL SKILLS

Programming Languages: Python, SQL, C/C++, C#, JavaScript, TypeScript

Tools: Azure Data Factory, Azure Functions, Azure SQL Database, Azure Logic Apps, Git, Docker, Postman, Azure DevOps

Libraries & Frameworks: .NET, FastAPI, React, React Native, Expo, Tamagui, TensorFlow, Keras, scikit-learn, NumPy, Pandas, OpenCV, Tkinter, Unity ML-Agents

## EXPERIENCE

#### Associate Software Engineer

Shell

 Built tailored integrations from scratch, handling varying business logic, transformation rules, and downstream compatibility requirements, delivering production-ready pipelines within tight timelines

• Designed, developed and deployed multiple ETL interfaces using Azure Data Factory to extract emissions data across countries and load them onto external reporting platforms, eliminating the risk of material non-compliance

• Implemented reusable generic file transfer templates using configuration tables, reducing dev time by 90% and saving approx \$80,000 annually

• Utilized Azure Functions and optimized advanced SQL queries for custom compute operations and complex transformations beyond native ADF capabilities

#### **Research Intern**

Indian Institute of Technology (BHU)

- Developed neural machine translation models for low-resource Indian languages, including Hindi, Marathi, Gujarati, and Nepali
- Implemented byte-pair encoding (BPE) to effectively handle rare word translations, improving BLEU scores by 41% (from 0.17 to 0.24)
- Integrated attention mechanisms and applied transfer learning to enhance model performance across multiple language pairs

#### Game Developer

Oneros Tech Pvt Ltd

- Collaborated with the core development team to write and refine in-game logic and algorithms, including dynamic timer difficulty adjustments based on player performance data
- · Conducted pre-launch and post-launch quality checks on multiple applications on the Play Store

• Gained end-to-end exposure to the full mobile game lifecycle - from prototyping and coding to deployment and user feedback iterations

## PROJECTS

#### **FLEXIST - AI Powered Fitness SaaS**

Full Stack, LLM Agent

- Built Flexist, an Al-powered fitness SaaS using FastAPI, PostgreSQL, Expo, and Tamagui
- Implemented dynamic theming, role-based authentication, and persistent state across platforms
- Integrated a functional AI module that generates structured workout JSON from user and gym data

FastAPI, PostgreSQL, Expo

Aug 2022 - Present Bangalore, India

May 2020 - Aug 2020

Pune, India (Remote)

June 2020 – Aug 2020

Varanasi, India (Remote)

RL Trained Enemy AI for Shooting Games Reinforcement Learning, Game Development	C#, Unity, ML-Agents
Trained a Unity agent using ML-Agents for autonomous aiming, movement, and shooting	or, only, we Agento
• Developed bots with human-like behavior (e.g., reacting to sound) for realistic training	
Applied curriculum learning and diverse environments to improve model adaptability	
Algorithmic Trading Bot for Cryptocurrencies	
Data Science, Machine Learning	Python, Binance API
<ul> <li>Built a Binance trading bot using pair-trading and momentum-based strategies</li> </ul>	
<ul> <li>Optimized MACD intervals and RSI thresholds using machine learning techniques</li> </ul>	
<ul> <li>Backtested on historical data to achieve profitable returns and strong win-rate</li> </ul>	
Facial Recognition Based Attendance System	[View]
Image Processing, Machine Learning	Python, OpenCV, Tkinter
<ul> <li>Developed a GUI-based face recognition system using OpenCV, Pandas, and Tkinter</li> </ul>	
<ul> <li>Automated attendance by detecting and matching faces from a live video feed</li> </ul>	
<ul> <li>Logged accurate, timestamped entries for subject-wise attendance records</li> </ul>	

## **EDUCATION**

Amity School of Engineering and Technology	Delhi, India
B.Tech in Computer Science and Engineering	Aug 2018 – May 2022
<b>Springdales School, Pusa Road</b>	Delhi, India
AISSCE – Physics, Chemistry, Mathematics, Computer Science (PCMCE)	Apr 2004 – May 2018

# **CERTIFICATIONS**

ISC2 Certified in Cybersecurity (CC) ISC2	Mar 2024
Academy Accreditation – Databricks Lakehouse Fundamentals Databricks	Mar 2023
<b>Software Developer Boot Camp</b> Construx Software	Mar 2023
Microsoft Certified: Azure Fundamentals (AZ-900) Microsoft	Nov 2022
Business of Games & Entrepreneurship Coursera / Michigan State	Aug 2020
Introduction to Game Development Coursera / Michigan State	Aug 2020
<b>Using Python to Access Web Data</b> Coursera / U. Michigan	Jul 2020
<b>Python Data Structures</b> Coursera / U. Michigan	Jan 2020
Microsoft Certified: Azure Developer Associate (AZ-204) Microsoft	Target 2025