# Muhammad Hamza Sial

✉ hamza.sial1911@gmail.com  📞 +92 3339979114

in https://linkedin.com/in/hamzasial1911/  ⬡ https://github.com/hamzasial1911

## SKILLS

**Languages:** C/C++, Java, Python, JavaScript, TypeScript, SQL

**Frameworks & Libraries:** React/Next.js/Remix, Node.js/Express, Spring Boot, Django/Flask/FastAPI/Pyramid, Kafka

**DevOps & CI/CD:** Docker/Kubernetes, Jenkins/GitHub Actions, Terraform/Ansible, Git, AWS (EC2, S3, Lambda, SQS, ECS), Azure (App Services, Functions), Google Cloud (Compute Engine, Kubernetes Engine, Cloud Run, Cloud SQL, BigQuery), Serverless options like Vercel, DigitalOcean (droplets, vps)

**Databases:** SQL (PostgreSQL, MySQL), NoSQL (MongoDB, Cassandra, Redis), Graph databases (Neo4j), Pinecone/Qdrant (Vector)

**AI/ML Tools:** GitHub Copilot/Cursor/Antigravity, TensorFlow/PyTorch (ML frameworks), Perplexity/Deep Research, LangChain/Hugging

## WORK EXPERIENCE

**Lead Engineer (APAC Region),** *Turing* 🔗                    07/2024 – present │ Contract
- Designed AI automations using Python, FastAPI, RAG, PostgreSQL, Redis, and GCP; enhanced workflow efficiency; accelerated AI training iterations for teams.
- Automated evaluation pipelines; streamlined data processing; delivered integral tools improving result quality.
- Led core team on labeling tools with NumPy; optimized processes remotely; boosted productivity through collaborations.
- Developed LLMs with reinforcement learning, APIs, Pandas, and NLP; optimized model accuracy; achieved AGI capabilities in full-stack context. *Skills: Python, FastAPI, RAG, PostgreSQL, Redis, GCP, Data Science, NumPy, NLP, Pandas, Reinforcement Learning, API Integration, Model Training, Cross-Functional Collaboration, Workflow Optimization*

**Software Developer,** *Devsinc* 🔗                    03/2023 – 07/2024 │ Full-time
- Spearheaded web app development using Django, DRF, Mako, Flask, Pyramid, FastAPI; managed AWS services like EC2, ECS, SQS, SNS, S3, DynamoDB; ensured seamless deployment, scalability, new features, and code optimizations.
- Led backend optimizations and feature implementations; integrated AWS for cloud infrastructure; achieved scalable solutions and improved application performance.
- Trained in Django for real-time projects; expanded to full-stack web development; collaborated cross-functionally to deliver innovative, efficient solutions.
- Honed skills in web apps and team collaborations; applied Django/DRF in projects; boosted project delivery and solution innovation. *Skills: Amazon Web Services (AWS), Machine Learning, Django, Django REST Framework, Mako Templates, Flask, Pyramid, FastAPI, EC2, ECS, SQS, SNS, S3, DynamoDB, Cross-Functional Collaboration, Web Development*

**Remote Software Developer,** *textingbetty* 🔗                    02/2022 – 05/2023 │ Contract
- Led the migration of workflows in Amazon Web Services (AWS) Lambda to manage webhook triggers, Slack notifications.
- Developed and deployed serverless functions using AWS Lambda to handle incoming webhook triggers, parse data into JSON format.

- Implemented Slack notification mechanisms within AWS Lambda functions to alert stakeholders about critical events and updates in real-time.
- Technologies used: Flask, Python, Amazon Web Services (AWS) Lambda, TitaniumDB.

**Backend Software Engineer,** *Billionaire club LLC*  ⊘         01/2021 – 02/2022 | Contract
- Developed APIs for news, videos, and post comments using Django and Django Rest Framework, enhancing user engagement and interaction on the platform.
- Integrated the APIs with Jinja templates to seamlessly render dynamic content on the frontend, ensuring a smooth and interactive user experience.
- Utilized PostgreSQL for efficient data storage and retrieval, maintaining data integrity and scalability of the application.
- Collaborated with the frontend team to ensure proper integration and functionality of the Jinja templates with the backend APIs, fostering effective communication and teamwork.
- Technologies used: Django, Django Rest Framework, PostgreSQL, Jinja templates.

## EDUCATION

**Bachelors in Computer Science,** *FAST - National*      2019 – 2023 | Lahore, Pakistan
*University of Computer and Emerging Sciences*  ⊘
- Relevant course work: Computer Programming, Data Structures, Database Systems, Design and Analysis of Algorithms, Human Computer Interaction, Artificial Intelligence, Information Retrieval, Data Science, Software Engineering, Natural Language Processing, Digital Image ProcessingOrganizational Behavior

## PROJECTS

**Nexbot,** *FastAPI + Next js + RAG Application*  ⊘         04/2022 – 05/2022
- Implemented user authentication and authorization using JSON Web Tokens (JWT)
- Created dynamic forms and implemented form validation using React Hooks
- Incorporated Redux actions,reducers and middleware to manage state
- Implemented features CRUD operations.

**Fund Raiser,** *Django + Next Js Web Application*  ⊘         06/2022 – 07/2022
- Developed an e-commerce website using Django and ReactJS
- Implemented user authentication and authorization using built-in authentication system of Django
- Connected the application to a PostgreSQL database to store and retrieve information about products, users, and orders
- Utilized Redux for state management of the shopping cart and user login
- Incorporated a search feature that allows users to filter products by category, price, and brand

**Library Management System,** *C++ Application*
- Developed a system to manage a library's book inventory, including adding, removing, and updating book records.
- Enabled functionalities for book issue, return, and tracking overdue books.
- Applied object-oriented principles to create modular components, making it easy to extend and maintain.
- Integrated file handling for data persistence, allowing data retention between program runs.

## CERTIFICATES

Google Cloud  ⊘  |  Softec'22 Deputy Head  ⊘