About Me

I am a Senior Python Developer specializing in Django and Django REST Framework (DRF) to architect scalable, secure APIs, complemented by FastAPI for high-performance microservices . Having 5+ years of experience, I've integrated machine learning workflows using TensorFlow, pandas, and NumPy to deliver data-driven features.

My expertise extends to automating end-to-end testing via Selenium WebDriver and building real-time applications with WebSockets and Django Channels backed by Redis.

Technical Skills

Programming Languages & Frameworks

- ➢ **Python:** Expert in Python 3.x, idiomatic coding, and virtual environment management.

- ➢ **Django & DRF:** Designed RESTful APIs, serializers, and custom viewsets for enterprise applications.

- ➢ **FastAPI:** Built asynchronous microservices with automatic OpenAPI docs and dependency injection [Arc](#).

Data Science & Machine Learning

- ➢ **TensorFlow & Keras:** Developed, trained, and deployed deep learning models for NLP and computer vision .

- ➢ **LLMs & NLP:** Integrated Hugging Face Transformers and custom language models into production services.

- ➢ **pandas & NumPy:** Engineered ETL pipelines and data analysis reports for business intelligence.

Web Development & API Design

- ➢ **REST & GraphQL:** Designed versioned REST endpoints and implemented GraphQL schemas for flexible data querying.

- ➢ **Authentication & Security:** Implemented JWT, OAuth2, and RBAC; enforced SSL/TLS and OWASP best practices.

DevOps & Cloud Infrastructure

- • **AWS Services:**

  - o **S3:** Managed buckets, lifecycle policies, and static site hosting.

- o **EC2:** Configured autoscaling, load balancers, and AMI pipelines.

- o **Lambda & API Gateway:** Built serverless functions for event-driven data processing Reddit.

- o **IAM & VPC:** Defined least-privilege access policies and private network topologies.

- **Containerization:** Docker, Kubernetes (EKS), and ECS for microservice orchestration

- **CI/CD:** Automated pipelines with GitHub Actions, Jenkins, and AWS CodePipeline.

Real-Time & Asynchronous Systems

- **WebSockets & Channels:** Implemented chat, notifications, and live dashboards using Django Channels with Redis layers.

- **Task Queues:** Celery, RabbitMQ, and AWS SQS/SNS for background job processing.

  Testing & Quality Assurance

- **Automation:** Selenium for UI regression; pytest and unittest for backend tests

- **Performance:** Profiling with Locust, JMeter; caching strategies using Redis and Memcached.

Portfolio Projects

1. Enterprise REST API Platform

- **Tech Stack:** Django, DRF, PostgreSQL, Redis, Docker, AWS EC2 & RDS.

- **Features:**

  - o Versioned endpoints, JWT auth, role-based access.

  - o CI/CD pipeline for automated testing and deployment.

  - o Caching layer with Redis reducing database load by 60%.

2. Asynchronous Microservices Suite

- **Tech Stack:** FastAPI, Celery, RabbitMQ, Kubernetes, AWS Lambda.

- **Features:**

  - o Event-driven image processing pipeline with S3 triggers.

  - o Real-time progress via WebSocket broadcast to frontend dashboard.

3. Machine Learning Inference Service

- **Tech Stack:** TensorFlow, Flask, Docker, AWS API Gateway & Lambda.

- **Features:**

    - Dockerized model serving with autoscaling Lambda for low-latency predictions.

    - Integrated Hugging Face LLM for NLP-based classification.

4. Real-Time Chat & Notification App

- **Tech Stack:** Django Channels, WebSockets, Redis, React.

- **Features:**

    - Bi-directional messaging with presence indicators.

    - Push notifications using AWS SNS.

5. Data Analytics Dashboard

- **Tech Stack:** pandas, NumPy, Dash/Plotly, AWS S3 & Athena.

- **Features:**

    - Interactive visualizations of ETL-processed datasets.

    - Scheduled batch jobs via AWS Lambda and CloudWatch Events.

6. Serverless Portfolio Website

- **Tech Stack:** Django (static build), AWS S3 hosting, CloudFront CDN.

- **Features:**

    - CI/CD with GitHub Actions deploying static assets to S3.

    - Form submissions via API Gateway → Lambda → DynamoDB.

Soft Skills

- **Communication:** Articulate technical concepts to diverse stakeholders [Medium](#).

- **Leadership:** Mentored junior developers, led scrum teams to deliver iterative features [Nucamp](#).

- **Collaboration:** Cross-functional coordination with product, QA, and DevOps teams [Medium](#).

- **Problem Solving:** Diagnosed complex issues under tight deadlines, proposing robust architectural refactors [Reddit](#).

- **Agility:** Adaptable to changing requirements, experienced in Agile/Scrum environments