

# VINAYAGAM D

Python Developer

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## PROFESSIONAL SUMMARY

Python Developer with 2 years of production experience building scalable Django applications for government platforms, non-profits, and e-commerce systems. Strong expertise in REST API design, PostgreSQL optimization, AWS infrastructure management, and real-time communication systems. Proven track record of delivering high-impact features including AI-powered validation systems, WhatsApp automation workflows, and multi-dashboard architectures serving 200,000+ users. Skilled in leveraging AI-assisted development tools to accelerate delivery while maintaining code quality and production reliability.

## TECHNICAL SKILLS

**Languages:** Python, JavaScript, HTML5, CSS3

**Backend Frameworks:** Django, Django REST Framework (DRF), Flask

**Databases:** PostgreSQL, MySQL, Redis, SQLite

**Cloud & Infrastructure:** Amazon Web Services (AWS) EC2, S3, IAM, Route53, SES, SNS, Linux, cPanel

**APIs & Integrations:** RESTful APIs, WhatsApp Business API, OpenAI API, Gemini API, Meta Graph API

**Real-time Systems:** Django Channels, WebSockets, Redis Pub/Sub

**Version Control:** Git, GitHub

**Development Tools:** VS Code, PyCharm, Cursor, Postman

**Developer Productivity:** ChatGPT, Claude, GitHub Copilot

**Methodologies:** Object-Oriented Programming (OOP), Agile

## PROFESSIONAL EXPERIENCE

### Python Django Developer — Thaagam Foundation — October 2023 – November 2025

- Shipped 8 production Django systems across NGO operations, government civic platforms, and payment-driven e-commerce applications
- Owned end-to-end backend architecture for donor Customer Relationship Management (CRM), Human Resources (HR) dashboards, and field operations tools using Django REST Framework and PostgreSQL
- Implemented Application Programming Interface (API) endpoints with API key authentication to support donor service image uploads from the Thaagam Field Mobile App
- Reduced notification overhead by 60% through automated WhatsApp, email, and Short Message Service (SMS) workflows using AWS Simple Email Service (SES), Simple Notification Service (SNS), and WhatsApp Business API
- Cut query times and report generation latency using Redis caching and Object-Relational Mapping (ORM) query refactoring
- Integrated Gemini and OpenAI APIs for image validation and fraud detection on donation and civic complaint platforms
- Set up real-time messaging dashboards with Django Channels, WebSockets, and Redis for client communication systems
- Managed AWS infrastructure including Elastic Compute Cloud (EC2), Simple Storage Service (S3), Identity and Access Management (IAM), and Route53 for multiple client deployments with monitoring
- Configured WhatsApp API instances for multiple clients with delivery tracking and automated message routing
- Collaborated with product and operations teams in Agile sprints to prioritize features and resolve production incidents

## KEY PROJECTS

### WASync WhatsApp Business Platform — January 2025 – April 2025

*URL: [wasync.m7corporation.com](http://wasync.m7corporation.com)*

*Tech Stack: Django, WhatsApp Business API, Meta Graph API, Django Channels, WebSockets, SQLite, Redis*

- Architected end-to-end WhatsApp Business API platform enabling small businesses to register and manage WhatsApp numbers
- Built admin portal for business registration, WhatsApp number provisioning, and template message management via Meta Graph API

- Developed client portal with real-time chat interface using Django Channels and WebSockets for two-way conversations
- Implemented automated template message system for marketing campaigns and customer notifications with delivery tracking

### **Chennai Corporation Image Analysis Platform — April 2025 – August 2025**

*URL: [imageanalysis.gccservices.in](http://imageanalysis.gccservices.in)*

*Tech Stack: Django, OpenAI API, AWS EC2, S3, PostgreSQL, Redis*

- Built Artificial Intelligence (AI) based before/after image validation system for civic issue resolution in Namma Chennai app
- Handled OpenAI API integration for automated fraud detection on government-scale complaint workflows
- Deployed on AWS with Redis caching to manage high-volume image processing requests

### **ACustomSong E-Commerce Platform — May 2024 – October 2024**

*URL: [acustomsong.com](http://acustomsong.com)*

*Tech Stack: Django, SQL, Payment Gateways, WhatsApp Business API, AWS SES*

- Developed admin dashboard modules to monitor transactions, payments, and order statuses
- Integrated WhatsApp Business API to automatically send payment receipts and deliver completed songs to customers
- Implemented backend workflows to ensure reliable order fulfillment and real-time communication with customers via WhatsApp

### **Thaagam Foundation Donation Platform — October 2023 – May 2024**

*URL: [thaagam.org](http://thaagam.org)*

*Tech Stack: Django, PostgreSQL, SQL, Redis, AWS EC2, S3, SES, SNS, Gemini API, WhatsApp API*

- Contributed donation CRM and operations backend serving 200,000+ users with Redis caching
- Implemented Gemini-based validation pipeline for donor verification and automated receipt generation
- Maintained multi-dashboard architecture for operations, donor management, and field team coordination
- Integrated payment gateways with webhook handlers for real-time payment updates and reconciliation

## **EDUCATION**

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**Master of Computer Applications** — Madras University, Chennai — August 2024 – May 2026 (Ongoing)

**Bachelor of Computer Science** — Thiru. A. Govindasamy Government Arts College, Tindivanam — June 2017 – May 2020

## **CERTIFICATIONS**

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**Machine Learning with NumPy, Pandas, Scikit-learn** – Eduative (2024)

[Certificate Verification Link](#)

**PHP Development** – CADD Center (2023)

## **KEY ACHIEVEMENTS**

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- Delivered 8 production Django systems across government, non-profit, and e-commerce sectors
- Improved application performance by 200% using Redis caching and query optimization techniques
- Built AI-powered validation system for fraud detection in donation and civic complaint platforms
- Reduced notification overhead by 60% through automation of communication workflows
- Managed AWS infrastructure serving 200,000+ active users with 99.9% uptime