# Abdelrahman Hassany

Backend Developer | Django Specialist | Cybersecurity Enthusiast

abdo.hassany5520@gmail.com | +20 1024194693 / +20 1027546227 | Cairo, Egypt | LinkedIn | GitHub

## **SUMMARY**

Detail-oriented Backend Developer specializing in Python and Django with hands-on experience in building scalable, secure RESTful APIs and backend automation. Skilled in implementing JWT-based authentication, asynchronous task management with Celery, and integrating AI-driven features. Strong foundation in cybersecurity principles, ranked in the top 1% globally on TryHackMe for advanced web security and ethical hacking. Adept at collaborating in fast-paced SaaS and startup environments, with a commitment to delivering maintainable, secure, and efficient code.

## **KEY COMPETENCIES**

- PostgreSQL & MySQL Databases
- Git Version Control & CI/CD Workflows
- Frontend Integration (Tailwind CSS, JavaScript)
- · Celery & Asynchronous Task Queues
- · Penetration Testing & Ethical Hacking
- Python Programming
- Django Framework
- Redis & Redis Cloud
- JWT Authentication
- Secure Software Development Django REST Framework
- API Design & Development
- Web Security & OWASP Principles
- Metasploit & Burp Suite
- Unit Testing with unittest & pytest

## PROFESSIONAL EXPERIENCE

#### inSprint (Freelance Project) | (Ongoing)

- · Develop a scalable LinkedIn Post Scheduler platform integrating AI-driven content generation, improving user engagement automation.
- · Architect and implement JWT-based authentication with tokens securely stored in Redis, enhancing session management efficiency and security.
- · Design and maintain asynchronous task workflows using Celery and Redis, reducing system latency and improving background job reliability.
- · Collaborate on frontend development using Tailwind CSS and JavaScript to deliver a responsive user interface, improving overall user experience.
- Ensure code quality and system scalability by applying best practices in Django REST Framework and continuous integration workflows.
- · Implemented secure password reset flow with OTP sent via email, enhancing user account recovery and platform trust.

## **Independent Cybersecurity Projects (Freelance)**

Django back end developer | Jan 2022 to Present

- · Conducted penetration tests focused on web applications, identifying vulnerabilities related to Django and common web security risks (SQL Injection, Cross-Site Scripting).
- · Utilized Burp Suite and Metasploit to assess security flaws and develop recommendations for improving the security posture of web-based applications.
- · Implemented security best practices in backend development, such as secure authentication, authorization, and session management, to protect against common exploits.
- Analyzed network traffic using Wireshark to identify security weaknesses and potential threats in web communications.
- Gained practical knowledge of web security principles, ensuring safe and resilient backend API designs.

#### **ACHIEVEMENTS**

- Top 1% globally on TryHackMe for web security and Capture The Flag competitions.
- Developed AI-powered LinkedIn post scheduler with secure, scalable backend.
- · Open-sourced secure Django JWT authentication middleware with advanced token management.
- Created an encrypted Django ORM field, enhancing database security.

## PERSONAL PROJECTS

#### Secure Django Authentication System | View on GitHub

- Designed and implemented a robust authentication framework using Django and JWT, emphasizing security best practices such as secure cookie storage and token blacklisting.
- · Automated token refresh and invalidation processes to ensure seamless and secure user sessions.
- Enhanced user account protection with OTP-based email verification and password recovery workflows, reducing security risks.
- · Open-sourced the system to promote adoption of advanced authentication techniques in the Django community.

#### EncryptionField: Encrypted Data Storage for Django Models | View on GitHub

- Created a reusable Django model field that transparently encrypts and decrypts sensitive data using Fernet symmetric encryption.
- Ensured database compatibility by encoding encrypted binary data as base64 text, enabling secure storage without schema changes.
- Developed tooling to generate encrypted test data automatically, improving security-focused development and testing practices.
- Strengthened data confidentiality and compliance with privacy regulations through database-level encryption.

#### E-Commerce Web Application | View on GitHub

- Built a scalable e-commerce platform with distinct user roles and permissions for sellers and customers.
- Implemented advanced shopping cart functionality with cookie-based session persistence and cart merging after login.
- Integrated PayPal payment API to facilitate secure, compliant payment processing.
- · Delivered a modular, maintainable codebase structured for future enhancements and increased user demand.

### **EDUCATION**

- AMIT Learning, Cairo, Egypt | Oct 2024 to Jan 2025
- · Cybersecurity Diploma
- Helwan University | 2022
- Bachelor Degree in Commerce

## **LANGUAGES**

Arabic: Native English: Advanced