

Mert Demirezen

Software Developer

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Green card holder

Summary

- **Passionate Full-Stack Python Developer** with **4+ years of experience** in building, deploying, and optimizing **scalable applications** in **cloud environments**.
- Skilled in both **front-end** and **back-end development**, with expertise in **Python-based frameworks (Django, Flask)** and modern **JavaScript** technologies (**React, Vue**).
- Proficient in **cloud platforms** like **AWS** and **GCP**, leveraging **Docker**, **Kubernetes**, and **CI/CD pipelines** to deliver **high-performance applications**.
- Demonstrated expertise in **data modeling**, **API development**, and **application security** within **Agile environments**.
- **Key Achievements:**
 - Enhanced application scalability and reduced response time by **30%** through **API management** and **AWS Auto Scaling** at **DXCTech**.
 - Secured **\$2.1M in funding** for a national tourism **SMB** by leading **end-to-end software development**, implementing **data-driven algorithms** for adaptable system performance at **Trolley Pub Knox**.
 - Achieved a **35% faster deployment process** and streamlined workflows using **Docker** and **GCP Cloud Build** for **continuous integration** at **VMware**.
 - Reduced page load time by **20%** through **JavaScript** and **AJAX optimization**, boosting **user experience** for web applications.
 - Developed and maintained **RESTful APIs** with **Django REST Framework**, achieving a **30% improvement** in application responsiveness and seamless **integration** between **front-end** and **back-end systems**.

Skillset

Front-end Technologies: HTML5, CSS3, JavaScript, TypeScript, React.js, Vue.js, Angular, Bootstrap, jQuery, AJAX, Tailwind CSS, Responsive UI Design, User Experience (UX) Optimization

Back-end Technologies: Python, Django, Flask, FastAPI, Node.js, Express.js, MicroPython, Embedded C, C++, RESTful APIs, GraphQL, SQLAlchemy, Django REST Framework, Alembic, Flask Blueprints, Microservices Architecture, WebSockets, Celery, Redis, RabbitMQ, Caching Mechanisms

Database Technologies: PostgreSQL, MySQL, SQLite, MongoDB, Firebase, DynamoDB, Cloud SQL (GCP), AWS RDS, Data Modeling & Schema Design

Cloud and DevOps: Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, Heroku, Firebase Hosting, Docker, Kubernetes, CI/CD Pipelines (Jenkins, GitHub, GitLab), AWS Lambda, CloudFormation, Google App Engine, EC2, S3, API Gateway, CloudWatch, GCP Cloud Build

Development Tools and Methodologies: Git, GitHub, GitLab, Pytest, Selenium, Postman, Insomnia (API Testing), Data Structures and Algorithms, JIRA, Agile (Scrum, Kanban), 3D CAD Software (for hardware design)

Programming Skills: Object-Oriented Programming (OOP), Event-Driven Programming, Algorithm Optimization, Debugging and Troubleshooting, Automated Testing, API Development and Integration

Professional Experience

Python Software Developer, DXC Technology

Feb 2024 – present | Remote, USA

- **Developed and maintained** robust Python-based applications using **Django** and **Flask** frameworks to meet client-specific requirements, deploying on **AWS EC2** to ensure scalability and performance in cloud environments.
- **Collaborated** with cross-functional teams, including product managers and UX designers, to transform project specifications into high-quality software solutions, optimizing **performance** and **scalability** through **AWS Auto Scaling** to support varying workload demands.
- **Implemented** efficient debugging and testing processes, performing **code reviews** to enhance code quality and **application reliability**, reducing bugs by over 20% during deployment cycles.
- **Utilized strong knowledge** of data structures and algorithms to write optimized code, enabling faster execution and meeting client performance requirements in complex data-driven applications.
- **Integrated RESTful APIs** with backend services, ensuring smooth data flow and enhancing interoperability between systems by 30%, with secure API management through **AWS API Gateway** for seamless communication.
- **Leveraged version control tools** like Git within an **Agile** environment to streamline collaboration and track changes effectively, contributing to a 15% improvement in team productivity and adherence to project timelines, with deployment infrastructure managed through **AWS CloudFormation**.

Software Engineer, Trolley Pub Knox

Dec 2022 – Jan 2024 | Knoxville, USA

- **Co-founded** and led **software development** for a national tourism **SMB**, securing **\$2.1M in funding** and overseeing end-to-end implementation of digital solutions to support business growth and client engagement.

- **Engineered** a customizable **drive mode system** for enhanced performance across varying conditions, leveraging data-driven **algorithm optimization** to ensure system adaptability and reliability.
- **Developed real-time algorithms** to calculate motor parameters, achieving a significant improvement in system **efficiency** and **response time** through dynamic data analysis.
- **Designed and manufactured** a user-friendly, custom **3D-printed Drive Mode panel** and **PCB** using advanced **CAD** software, enhancing **user interaction** and **system control**.
- **Programmed** robust **communication protocols** in **MicroPython**, **Embedded C**, and **C++** to facilitate real-time data exchange and integration across system components.
- **Built** a Python-based **watermark application** with **Tkinter** and **PIL** for adding customizable text watermarks on images, improving image security and user personalization.

Python Full Stack Developer, *VMware*

Jul 2020 – Nov 2022 | Remote, USA

- **Designed and developed** intuitive user interfaces using **JavaScript**, **jQuery**, **HTML5**, and **CSS3**, enhancing UI responsiveness and optimizing user experience for web applications.
- **Collaborated** closely with back-end developers to seamlessly integrate front-end components with **server-side APIs** and **Django** back-end, leveraging **GCP Cloud Functions** for secure, event-driven processing of backend tasks and ensuring efficient data flow.
- **Built and maintained** RESTful APIs using **Django REST Framework**, facilitating robust data exchange between front-end and back-end systems, improving application responsiveness by 30%, with API management hosted on **GCP API Gateway** to streamline scalability.
- **Optimized application performance** by implementing efficient **JavaScript** and **AJAX** techniques, achieving a 20% reduction in page load time.
- **Developed and deployed** web applications using **Python** and **Django**, following best practices for maintainable and scalable code, with deployments managed on **Google App Engine** to ensure reliable, auto-scaling production environments.
- **Utilized Docker** for containerization, achieving a 35% faster deployment process and streamlined application updates across development, staging, and production environments, with **GCP Cloud Build** used for continuous integration in the development pipeline.
- **Created and managed** SQL database schemas in **PostgreSQL** for data storage and retrieval, optimizing data access with complex SQL queries and integrating with **GCP Cloud SQL** for scalable, managed database solutions.
- **Actively participated** in **Agile (Scrum)** development meetings and contributed to sprint planning to improve project management and development cycle efficiency.
- **Stayed updated** with front-end frameworks and emerging UI trends, applying new insights to improve the user experience and modernize application interfaces.

Projects

Typing Speed Tester GUI | Python, Tkinter, OOP

- Developed a Python-based application to measure and improve typing speed through timed tests.
- Built a GUI using Tkinter, featuring real-time performance tracking and error detection.
- Utilized OOP principles for a modular, scalable codebase.

Finance Manager Automation | Python, gspread, Regular Expressions, CSV

- Created a Python script to automate financial transaction categorization and updates in Google Sheets.
- Integrated CSV parsing and data manipulation with Google Sheets API.

Backend Application Development with Flask | Python, Flask, Alembic, ORM

- Developed a Twitter-like API using Flask, SQLAlchemy ORM, and Alembic for database migrations.
- Implemented CRUD operations for users and tweets, including managing many-to-many relationships.
- Created and migrated database models for users, tweets, and likes.
- Used Flask Blueprints to organize API routes and implemented multiple endpoints.
- Tested API functionality with the Insomnia client for seamless integration and performance.
- Deployed database migrations and managed version control using Alembic in a Dockerized environment.

Certificates

- Google Crash Course on Python
- Google Using Python to Interact with the Operating System
- Hacker Rank Introduction to Programming Using Python
- 100 Days of Code: The Complete Python Pro Bootcamp

Education

Back End, SQL, and DevOps Developer, *Nucamp Coding Bootcamp*

Aug 2024 – Nov 2024 | United States

Bachelor of Science in Electrical and Electronics Engineering, *Kırıkkale University*

Sep 2016 – Jun 2020 | Kırıkkale, Turkey