# MUSTAFA DEĞER GÖKALP

# Full-Stack Software Developer AWS Certified Solutions Specialist

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# EDUCATION ISTANBUL MEF UNIVERSITY

Bachelor, Computer Engineering

Turkey | 2021 - 2024

#### **Capstone Project:**

Enhancing Parallelism in Sparse Triangular Solve (SpTRSV) Computations Using Reinforcement Learning

- Developed an innovative graph transformation strategy to significantly enhance the parallelism in SpTRSV computations.
- Utilized Reinforcement Learning techniques to modify the dependency graph of sparse matrices, leading to improved parallel execution.
- Addressed the inherent challenges of serial computations in SpTRSV, enabling more efficient processing and computational performance.
- Achieved TÜBİTAK approval for the project's advanced approach and potential impact on computational efficiency.

#### EASTERN MEDITERRANEAN UNIVERSITY

Turkish Republic of Northern Cyprus | 2020 - 2021

Bachelor, Computer Engineering

Commenced studies in Computer Engineering at Eastern Mediterranean University and transferred to MEF University after the first year

# **Expertise**

# AI & Reinforcement Learning

- Developed RL-based solutions for **dynamic graph and sparse matrix parallelization**, optimizing computational performance.
- Designed Text-to-Speech (TTS) and Speech-to-Text (STT) systems using AWS Polly, AWS
  Transcribe, and OpenAl models, enabling user interaction with GPT-powered applications.
- Built end-to-end Al applications integrating RL, TTS, and STT for dynamic, voice-based user experiences.

#### **Full-Stack Development & Web Applications**

- Proficient in backend and frontend development using Ruby on Rails, Ember.js, Django, and
   Node is
- Designed and deployed scalable web applications with intuitive user interfaces and robust APIs.
- Experience in **API development** and integration with cloud-based solutions for seamless client interactions.

#### **AWS Cloud Infrastructure & Software Design**

- Designed and optimized cloud architectures to enhance scalability, reliability, and cost efficiency for user-facing applications.
- Led projects to reduce infrastructure costs, improve scalability, and ensure high availability with serverless and containerized solutions.
- Expertise in implementing Well-Architected Frameworks, cloud-native development, and hybrid cloud technologies.

#### **Client Management & Collaboration**

- Delivered custom solutions to meet diverse client needs, maintaining a high success rate in client satisfaction.
- Collaborated cross-functionally with teams, ensuring smooth communication and alignment on project goals.
- Led Agile-based sprints, backlog reviews, and ensured on-time delivery of high-quality results.

#### **EXPERIENCE**

# **PARAŞÜT**

## Mid. Full Stack Software Developer | İstanbul

Nov 2023 - current

My role involves creating backend and frontend services ensuring seamless integration as a Full Stack Developer. I design, implement, and optimize AWS architectures, utilizing services like Lambda, API Gateway, S3, CloudFront, EC2, and CloudShell. I led a project aiming to achieve a 75% reduction in S3 costs through effective lifecycle management. Additionally, I integrated AWS services (S3, Lambda, API Gateway) into the Paraşüt application to enhance user experience and comply with government GIB (Revenue Administration) regulations. I work closely with cross-functional teams, ensuring smooth communication and high performance throughout the development process. Provided critical support for client-facing issues, assisting the support teams when needed to resolve complex technical problems.

#### **Key Responsibilities:**

- Backend and Frontend Development:
  - Designed, developed, and maintained both backend and frontend parts to ensure smooth integration and high performance.
  - Used Ruby on Rails for backend development and EmberJs for frontend, creating responsive and dynamic user interfaces.
- AWS Architecture Design and Optimization:
  - Implemented and optimized AWS architectures using services to improve application performance and scalability.
  - Designed and deployed serverless applications with AWS Lambda (Node.js and Python), reducing infrastructure costs and improving efficiency.
- Cost Management and Optimization:
  - Led a project to reduce S3 costs by 75% through effective lifecycle management strategies.
  - Developed and applied cost-saving methods, optimizing data storage and retrieval processes.
- Performance Monitoring and Troubleshooting:
  - Used AWS CloudWatch for real-time monitoring and logging, ensuring high availability and quick problem resolution while also sending error notifications to BugSnag and Slack for efficient tracking and team alerts.
  - Diagnosed and fixed performance issues, ensuring smooth and uninterrupted service.
- Collaboration and Communication:
  - Worked closely with various teams, including product managers, designers, and other developers, to align project goals and deliverables. Participated in Agile meetings, contributing to sprint planning, daily stand-ups, and retrospectives.
- Sprint and Backlog Management:

 Reviewed job codes and tasks during sprints and backlog planning to ensure alignment and maintain code quality. Conducted thorough analysis for tasks introduced into the backlog and sprint, ensuring that they are prioritized and aligned with project goals.

#### MY TRADING CODER

## Contracter Full-Stack Software Developer/Project Consultant | United State Sep 2024 - Nov 2024

I designed and implemented a customizable web application for algorithmic trading tailored to client requirements. The platform allows users to configure trading parameters, connect API keys, and choose between day trading or holding overnight. Initially supporting Alpaca, it is built for scalability with plans to expand to other brokers. Key features include user authentication, payment integration, a live dashboard, backtesting and forward testing tools, and a referral system. The app is optimized for real-time analytics and aims to onboard up to 1,000 users within its first year.

#### **UPWORK**

#### **Freelance Software Developer**

Mar 2023 - Oct 2024

As an ex-freelance software developer on Upwork, I specialized in delivering high-quality software and cloud infrastructure solutions tailored to the unique needs of clients across a variety of industries. My work spanned complex algorithmic trading systems, cloud-based infrastructure, and full-stack web applications. I prioritized seamless client communication, ensuring that all technical solutions aligned with business objectives and providing ongoing support and problem resolution throughout the project lifecycle.

#### **Key Responsibilities:**

- Top Rated Freelancer:
  - Achieved Top Rated Freelancer status on Upwork, ranking in the top 1% of developers.
  - Maintained a 100% Job Success Rate, demonstrating consistent delivery of high-quality work and client satisfaction.
- Software, Infrastructure, and Full-Stack Development:
  - Designed and developed software and infrastructure solutions tailored to client needs, focusing on scalability, security, and performance. Created complex algorithmic trading systems, integrating both SQL and NoSQL databases, and built APIs to ensure efficient data management. Utilized advanced Python for backend development and Django for frontend applications, along with customized algorithmic structures, NLP and LLM based services to enhance application performance.
- Project Management:
  - Successfully executed over 80+ milestones and completed 15 diverse projects, ranging from small tasks to extensive, multi-faceted projects.
  - Led teams on five projects using Agile methodologies, taking responsibility for opening tasks, managing timelines, and conducting reviews.
- Client Engagement and Problem Solving:
  - Collaborated closely with clients through regular meetings to gather requirements, solve problems, and adjust solutions based on their evolving needs. Engaged in real-time feedback sessions to optimize trading systems and cloud infrastructures, ensuring the solutions met client-specific challenges.

#### **BILETBANK TECHNOLOGY**

# Intern Software Developer | Istanbul

Jun 2023 - Aug 2023

Designed and implemented a .NET Core-based fraud detection and notification system, utilizing object-oriented programming to enhance functionality and ensure robust, real-time system responsiveness.

# **PROFESSIONAL SKILLS**

#### **Programming Languages:**

- Python
- JavaScript
- C
- Ruby
- Java
- Shell scripts

# Web Development:

- Django
- Flask
- Ember.js
- HTML/CSS
- Ruby on Rails
- Node.js
- API design and Integration

#### Databases:

- SQL (MSSQL, SQLite, MySQL, PostgreSQL)
- NoSQL (MongoDB, DynamoDB)
- Redis

#### **Cloud Services:**

- Amazon Web Services (AWS)
- Well-Architected Frameworks (Cloud Based solutions)
- Cloud-Native Development
- Hybrid Cloud technologies
  - AWS AI services
  - o OpenAl Al services
  - Automation
  - o Security
  - Networking
  - Storage

#### **Development Tools:**

- Git
- Docker
- Jenkins
- PAM
- Rancher
- Bugsnag
- Kubernetes

# **Operating Systems:**

- Linux
- Ubuntu
- Windows

#### Agile Methodologies:

• Scrum

#### Soft Skills:

- Analytical Thinking
- Problem-Solving
- Communication
- Team Collaboration
- Time Management
- Adaptability
- Leadership
- Client relationship management
- Attention to Detail

• Flexibility to Learn New Technologies

# Language Skills

- Native in Turkish
- Fluent in English

#### Certifications

- AWS Certified Security Specialty SCS-C02; <u>Amazon Web Services (2024)</u>
- AWS Certified Data Engineer Associate DEA-C01; <u>Amazon Web Services (2024)</u>
- AWS Certified Solutions Architect Associate SAA-C03; Amazon Web Services (2023)
- Building Modern Python Applications on AWS; <u>Amazon Web Services and edX (2022)</u>
- Amazon DynamoDB: Building NoSQL Database-Driven Applications; <u>Amazon Web Services and edX (2022)</u>
- AWS Cloud Technical Essentials: Amazon Web Services and edX (2022)
- IBM Introduction to Cloud Development with HTML, CSS, and JavaScript: IBM and edX (2022)
- The Linux Foundation Introduction to Linux: The Linux Foundation and edX (2022)