

Tuğberk Kaan Duman

[contact information is redacted in this version]

SUMMARY

Cloud-focused problem solver leveraging diverse technologies to engineer innovative solutions across cloud and on-premise infrastructure. Detail-oriented, dedicated, and a champion of efficiency through continuous learning and exploration. Adept at mastering new technologies and adapting to dynamic environments. Passionate about exploring cutting-edge applications.

EXPERIENCE

Associate Engineering Manager

OREDATA

January 2025 - Present, İstanbul, TR

- Mentored a team of engineers by conducting in-depth code reviews and delivering tailored guidance, enhancing code quality and security; accelerating professional growth across the team.
- Managed project timelines and resource allocation using agile methodologies, collaborating with cross-functional teams to ensure seamless delivery of milestones for complex engineering initiatives.
- Strengthened technical foundations by contributing to architecture design and decision-making, implementing solutions to maintain high standards of scalability and reliability for PoCs and the full-scale solutions.
- Enhanced team capabilities by partnering with HR and leadership to recruit top-tier engineering talent and streamline onboarding processes, building a cohesive and high-performing team culture.
- Improved operational efficiency by supporting the creation of engineering strategies aligned with business goals, optimizing workflows to boost productivity and project throughput.
- Adapted to new AI tools (Cursor, Windsurf, Bolt, Lovable, Claude Code, Gemini CLI and more) for rapid prototyping (PoCs), boosting development speeds heavily.
- Facilitated cross-departmental collaboration with product and design teams, driving clear communication and troubleshooting challenges to deliver robust, user-focused solutions.
- Helped defining and tracking KPIs and OKRs to align engineering efforts with business goals, fostering a culture of accountability and continuous improvement across the team.
- Developed in-depth technical guides and case studies that outlined the company's proficiency in Google Cloud solutions, significantly contributing to earning a Google Cloud Specialization and elevating the company's standing in the industry.
- Successfully represented the company at international tech events, such as Web Summit Qatar, by networking with global industry leaders and promoting Oredata's services.
- Pioneered the adoption of cutting-edge agentic AI technologies (Agentic AI), including Agentspace, ADK, and A2A, demonstrating early expertise in emerging standards and frameworks.

Senior Software Engineer

OREDATA

September 2022 - Present, İstanbul, TR

- Designed and implemented multi-user isolation and quota management for Google's open-source MLOps platform, significantly improving resource allocation efficiency by introducing features previously unavailable in the platform.
- Implemented automated monitoring and alerting for Kubernetes clusters (20+ nodes), ensuring high service availability even in environments with limited internet access.
- Resolved complex integration challenges between Spark, Hadoop, Kubernetes, and proxies in a secure, Kerberized environment, streamlining communication across the stack.
- Provided technical guidance to non-developer teams and clients, improving issue resolution through tailored training and clear documentation.
- Created pre-sales demo solutions that showcased product capabilities, accelerating the sales cycle and attracting new customers.
- Developed custom solutions using a diverse tech stack (Java, Spring, Go, Python, React, Angular, TypeScript, NodeJS and more) to optimize operational processes for leading insurance, banking, gaming, telecommunication (and more...) clients.
- Leveraged OpenShift and vanilla k8s for container orchestration, achieving efficient scaling and meeting critical performance targets.
- Implemented Google Cloud solutions using Cloud Run, Cloud Functions, Vertex AI, Cloud Storage, CloudSQL, Apigee (and more); optimizing system performance for client needs.
- Automated infrastructure provisioning and configuration by integrating GitHub Actions with Google Cloud, streamlining the deployment process.
- Architected microservice patterns that enhanced system responsiveness and overall performance.
- Enhanced code security by integrating Trivy for vulnerability scanning and SonarQube for quality analysis.
- Created detailed Software Requirements Specifications (SRS) and Software Design Documents (SDD) to provide clear project guidelines and support effective execution.

Full-Stack Engineer

Goodgame Studios

March 2022 - September 2022, Hamburg, DE (Remote+Freelance)

- Improved API performance for a large-scale platform by refining existing API integrations with AWS tools, ensuring smooth operation for a system serving over 3 million users.
- Designed and built new features in a serverless ecosystem, utilizing AWS CDK, SQS, API Gateway, DynamoDB, PostgreSQL on EC2, CloudWatch, S3, and over 400 Lambda functions to deliver robust and scalable functionality tailored to project needs.
- Supported game developers through integration challenges, conducting detailed walkthroughs and troubleshooting sessions to maintain project momentum and ensure seamless collaboration.
- Enhanced code quality and deployment reliability by refactoring existing codebases, implementing cloud infrastructure best practices, and leading initiatives that improved maintainability and boosted team productivity.
- Strengthened platform capabilities with backend development, creating Node.js routes and serverless functions using TypeScript to expand functionality and improve the overall user experience.

Software Specialist

Frumatic

May 2021 - September 2022, Ankara, TR

- Configured extensive API connections with AWS services, streamlining data retrieval and improving system responsiveness.
- Structured scalable cloud systems using AWS technologies, reducing operational costs through efficient design.
- Managed over 150 Lambda functions, ensuring high availability and smooth operation with AWS monitoring tools.
- Designed and deployed cloud-native solutions using Java, Spring, Python, TypeScript, and Node.js for key B2B and B2C clients, boosting operational efficiency.
- Implemented data-driven tools via integrated logging, enabling faster issue resolution and better project outcomes.
- Automated cloud resource provisioning and management by integrating Jenkins with AWS services, enhancing operational workflows.
- Optimized microservice communication and data flow using design patterns such as CQRS and Event Sourcing.
- Facilitated sprint reviews and lean coffee sessions, refining team processes and communication.
- Improved prediction accuracy by integrating Here, Wave, and OSM mapping data into custom algorithms.

Software Engineer

Simdatix

October 2020 - May 2021, Ankara, TR

- Built reliable and efficient backend solutions using NodeJS and Express, improving application stability.
- Implemented AWS serverless solutions (Cognito, AppSync, RDS, SQS), optimizing infrastructure flexibility and cost.
- Automated API documentation and testing using Postman, Mocha, and Chai, improving code coverage and maintainability.
- Collaborated with design teams on UX enhancements, elevating user engagement.
- Leveraged Terraform for modular infrastructure deployment, ensuring scalability and consistency.

Software Engineer

Ulak Haberleşme

December 2019 - October 2020, Ankara, TR

- Engineered integrated front-end using Angular 7 and Java back-end, improving data accessibility and user-facing interface for complex NAT services.
- Delivered in-depth technical insights to customer support teams on high-scale projects, reducing technical issues by 30% and boosting customer satisfaction.
- Implemented and validated crucial server solutions such as SSL, DNS, DHCP, and SMTP, utilizing extensive technical procedures to enhance platform security and reliability.
- Produced optimized ISO files for automated and headless server deployments, resulting in a 90% reduction in setup time.
- Optimized data handling in Docker containers by defining storage and retrieval protocols, leading to more efficient access and usage.
- Deployed and managed Kubernetes-based CI pipelines, leading to improved build times and overall developer productivity.
- Streamlined build processes for SDWAN using Jenkins, resulting in a 30% reduction in deployment time and increased team efficiency.
- Conducted fieldwork to collect user feedback, successfully contributing to project outcomes while aligning development with end-user needs.

Software Engineer

Tanitek

August 2019 - December 2019, Ankara, TR

- Engineered facial recognition and TTS (Text-to-Speech) systems using Python 3, deploying solutions widely across various media channels, resulting in 99.9% operation reliability.
- Scaled PostgreSQL database to manage over 400 million items, resulting in improved data retrieval times.
- Configured RAID arrays and LVMs for Linux servers to optimize disk performance and resource management, achieving a 15% increase in data access speed.
- Deployed comprehensive software solutions including VPNs and project management systems over ESXi, demonstrating adaptability in a virtualized environment.
- Utilized object-oriented programming principles to architect and implement scalable software applications, improving code maintainability and efficiency.
- Developed a scalable data architecture for a high-volume collector project, optimizing database performance and reliability using MongoDB.
- Leveraged Qt framework (Core, Widgets, GUI modules) to design intuitive interfaces in C++ applications, improving overall user engagement.

Android Mentor

Udacity

March 2019 - November 2019, Emeryville, CA (Remote)

- Awarded **top 1%** distinction upon graduation from the inaugural **Google Nanodegree Scholarship** program.
- Mentored 10+ students for 6 months, guiding mentees through Google-developed courses on Udacity and personally tracking mentee progress through weekly 1:1 sessions.
- Organized and hosted engaging weekly webinars for 10+ students, including interactive AMA sessions covering Android Java development.

Web Developer Internship

Özgür Yazılım

July 2018 - September 2018, Ankara, TR

- Created secure backend functionalities in the WordPress framework with PHP, reducing security vulnerabilities by 30%.
- Implemented accessibility features to meet WCAG standards, improving usability for differently-abled users.
- Designed and executed automated unit tests, leading to a 30% reduction in bugs reported post-deployment.
- Developed key frontend and backend elements for a major military corporation's website, ensuring a secure and user-friendly experience.
- Documented backend improvements consistently, ensuring clear communication and seamless knowledge transfer.

Laboratory Assistant

Ankara University

June 2017 - September 2017, Ankara, TR

- Performed general office duties and administrative tasks.
- Assisted students during C++ classes with their questions and maintained laboratory order.
- Kept OSes up-to-date and clean, found security holes and fixed them.
- Graded students based on their code quality and checked for discrepancies within the code.

Brand Ambassador

Mynt Labs

May 2015 - February 2016, Dublin, IR (Remote)

- Performed general office duties and administrative tasks.
- Prepared weekly reports on user engagement.
- Managed the external communications with the other companies located in Turkey.

- Gathered feedback for creating, developing new ideas.
- Managed communication with the Turkish users and the foreigners if needed.

EDUCATION

Bachelor of Science in Computer Engineering

Ankara University • Ankara, TR • 2019

Bachelor of Science in Electrical and Electronics Engineering

Anadolu University • Eskişehir, TR

Android Nanodegree by Google

Udacity • Emeryville, CA (Remote) • 2018

CERTIFICATIONS

2025 Google Cloud Partner All-star in AI Innovation

Google • 2025

- This award is a reflection of my passion for leveraging AI to fundamentally alter business outcomes, helping customers create new revenue streams and achieve results.

Professional Cloud Architect Certification (Google Cloud)

https://www.credly.com/badges/7fcd0939-789f-4978-8495-06f787990bf2/linked_in_profile • 2024

- Professional Cloud Architects enable organizations to leverage Google Cloud technologies. With a thorough understanding of cloud architecture and Google Cloud, they design, develop, and manage robust, secure, scalable, highly available, and dynamic solutions to drive business objectives.

Professional Cloud Developer (Google Cloud)

<https://google.accreditable.com/0a397e1f-028f-4e79-88fd-393044c9bce4> • 2024

- A Professional Cloud Developer builds scalable and highly available applications using Google-recommended tools and best practices. This individual has experience with cloud-native applications, developer tools, managed services, and next-generation databases. A Professional Cloud Developer also has proficiency with at least one general-purpose programming language and instruments their code to produce metrics, logs, and traces.

Android Nanodegree

<https://www.udacity.com/certificate/YMJXCPDT> • 2018

- Helped creation of mobile applications when necessary.

Web Development Engineering

Amazon, AWS • 2019

- Created cloud powered part of my graduation project over at Amazon by fully utilizing their AWS infrastructure.
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