

Cemal Can Akgül

Software Development Group Manager

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🛡️ Compulsory military service (15 months) 🔗 [linkedin.com/in/cemalcanankgul](https://www.linkedin.com/in/cemalcanankgul)



🎓 Education

Feb 2018 – Sep 2019
Istanbul, Turkiye

Doğuş University

Master's degree, Computer Engineering

- Artificial Intelligence Systems
- Machine Learning (Plus, Term Project Topic)
- Data Mining
- Text Mining
- Advanced Finite State Techniques in Language Processing
- Theory of Computing
- Software Project Management
- Software Process Improvement
- Advanced Data Structures and Algorithms
- Object Oriented Design and Application

Sep 2012 – Jan 2016
Eskisehit, Turkiye

Anadolu University

Bachelor's degree, Business Administration and Management, General

Sep 2009 – Aug 2012
Mersin, Turkiye

Mersin University

Associate's degree, Computer Programming

💼 Work Experience

Jul 2025 – present
Istanbul, Turkiye

Memorial Healthcare Group

Software Development Group Manager

KoçSistem Information and Communication Services Inc.

Jan 2024 – Apr 2025
Istanbul, Turkiye

Lead Software Architect

Jul 2023 – Dec 2023
Istanbul, Turkiye

Lead Software Architect & Architecture Chapter Lead

Dec 2022 – Jun 2023
Istanbul, Turkiye

Senior Software Architect & Architecture Chapter Lead

Jan 2021 – Nov 2022
Istanbul, Turkiye

Software Development Technology Manager & Architecture Chapter Lead

Aug 2019 – Jan 2021
Istanbul, Turkiye

Software Development Technology Manager

Sep 2017 – Aug 2019
Istanbul, Turkiye

Analysis and Design Leader & Scrum Master

Jan 2014 – Aug 2017
Istanbul, Turkiye

Analysis and Design Leader

Jul 2012 – Dec 2013
Istanbul, Turkiye

D-Smart

Software Consultant

Mar 2010 – Jul 2012
Istanbul, Turkiye

BilgeAdam Technology

Software and Database Development Trainer

Nov 2005 – Mar 2010
Istanbul, Turkiye

Freelance

Freelance Web Developer

🧠 Skills

Soft Skills

- Communication, Leadership, Teamwork, Delegating, Management
- Supervising, Customer Service, Organizational Skills, Professionalism
- Diplomacy, Attention to Detail, Public Speaking, Time Management, Listening

Hard skills

- C# (Advanced), .Net Core (Advanced), Node.js (Intermediate), SQL (Advanced)
- NoSQL (Intermediate), React (Advanced), Vue.js (Intermediate), Blazor (Advanced)
- Cloud Architecture (Advanced), Microservices Architecture (Advanced)
- Agile Methodologies (Advanced)

Languages

Turkish – Native, English – B2 | Upper-intermediate | IELTS

Certificates

Azure Administrator Associate

Leadership in 21st Century Organizations by Copenhagen Business School

How to Manage a Remote Team by GitLab

Lead ReMood Program

Communication Strategies for a Virtual Age by University of Toronto

The Science of Success: What Researchers Know that You Should Know by University of Michigan

Leadership

Microsoft Certified Professional Developer (MCPD)

Microsoft Certified: AZ-203 - Azure Developer Associate (Retired)

Azure Development, Cloud Integration, API Management

Microsoft Certified: AZ-204 - Azure Administrator Associate

Azure Solutions Development, DevOps Integration, CI/CD Pipelines

Interests

- Walking
- Learning languages
- Photography
- Agile organizations
- Technology trends
- Software development innovations

Agile Organizations

Jan 2024 – May 2024

Fairness and Transparency Team

KoçSistem

Role: Career section lead

The Fairness and Transparency study aims to identify areas where employees feel disturbed and worried, and to pinpoint issues of perceived unfairness within the company. We determined solution steps and conveyed an action plan to the C-level executives for discussion and implementation. As a result, all identified problems were resolved, and unfair and non-transparent situations between employees and the company were eliminated. Surveys conducted following this study showed a **27% increase in employee loyalty to the company**.

Jan 2023 – Dec 2023

Architecture Chapter

KoçSistem

The main goals of the organization are to technologically improve the company's technologies, increase team coordination, create an information-sharing environment, and establish a training environment.

In this context, **18 events** and **20 L&L** training sessions were held during the year. Surveys conducted as a result of these studies showed a **43% increase in developer productivity**. Through all the events, we reached over **450+ different participants** from 9 Koç Holding companies.

After three consecutive years of significant productivity improvements and enhanced team coordination, I handed over this task to a teammate I trained, passing the baton to take on new responsibilities and roles.

Jan 2022 – Dec 2022

Architecture Chapter

KoçSistem

Role: Chapter lead

The main goals of the organization are to technologically improve the company's technologies, increase team coordination, create an information-sharing environment, and establish a training environment.

In this context, **18 events** and **20 L&L** training sessions were held during the year. Surveys conducted as a result of these studies showed a **37% increase in developer productivity**. Through all the events, we reached over **350+ different participants** from 9 Koç Holding companies.

Jan 2021 – Dec 2021

Architecture Chapter

KoçSistem

Role: Chapter lead

The main goals of the organization are technological improvement of the company's technologies, increasing team coordination, creating an information-sharing environment, and establishing a training environment.

In this context, **20 events** and **9 L&L** training sessions were held during the year. Surveys conducted as a result of these efforts indicated a **30% increase in developer productivity**.

Through all the events, we reached over **170+ different participants** from 3 Koç Holding companies.

Feb 2018 – Dec 2018

Agile Society Turkey

Role: Co-founder

I worked to promote agile approaches and minimize existing misperceptions by producing, sharing, and maintaining documentation, services, and results that everyone could use free of charge for this purpose.

I left active duty in December 2018 due to a heavy workload.

Consultancy

Jun 2024 – Dec 2024

Koç University

Software Development Manager Monitoring, Evaluation, and Improvement of Business Processes

Project Role: Lead officer

Duration: 72 days

This consultancy work involves monitoring and evaluating development processes alongside the Software Development Manager in a shadow role. It includes providing suggestions for software process improvements when necessary, enhancing the project development ecosystem, and transferring best practices in project management.

Jan 2024 – May 2024

Koç University

Microservices & Architectural Decisions

Project Role: Lead officer

Duration: 30 days

This consultancy work was carried out to update the microservice project that started in 2022 and meet current needs.

Jan 2024 – Sep 2024

Otokar - Telematics

Project Role: Lead officer

Duration: 35 days

This software development project focuses on the real-time measurement and evaluation of all fleet metrics through vehicle tracking, reporting, and warning mechanisms. Using telematic devices connected to Otokar's existing Metrobus fleet as a reference, the project's aim is to track over 1,000 vehicles instantly and take necessary actions. I oversaw and guided the teams throughout the project.

Jul 2023 – Sep 2023

Sendeo

Application Modernization

Project Role: Lead officer

Duration: 60 days

After examining the company's existing structures, we identified the necessary points for faster and more stable system operation. Following this analysis, a report was prepared outlining the areas that needed to be changed, rewritten, or removed.

May 2023 – Jul 2023

Ford

Azure API Management Transformation

Project Role: Lead officer

Duration: 60 days

We consolidated the currently used API endpoints into a single point using Azure API Management services, ensuring security and documentation through the portal. Once the system was ready, we completed the handover, training, and consultancy phases.

May 2023 – Jun 2023

Arçelik

Microservice Transformation

Project Role: Lead officer

Duration: 40 days

After examining the existing systems, we conducted consultancy, training, and auditing on the end-to-end microservice transformation.

Nov 2022 – Dec 2022

Demir Export

DevOps Transformation

Project Role: Lead officer

Duration: 35 days

The consultancy work included transferring the source codes from Bitbucket servers to the Azure DevOps environment. It also involved training on all necessary security procedures, CI/CD processes, Docker, Kubernetes, and branch strategies.

- Sep 2022 – Dec 2022 **Koc University**
Microservice Transformation
Project Role: Lead officer
Duration: 150 days
 The primary focus of the software architect consultancy was to implement best practices in microservice transformation. This included providing training to renew their existing systems with a microservice topology.
- May 2022 – Dec 2022 **TAM Bilesim A.Ş.**
Project Role: Lead assessment officer
Duration: 30 days
 This consultancy work focuses on the inspection and improvement of a nationwide ATM system. The goal is to establish a unified ATM system for all bank ATMs in Turkey, targeting 20,000 ATMs and encompassing all banks in the country. The system examination involves a consultancy study that emphasizes technology selection and methods, identifying renewal points based on the evaluation results.
- May 2022 – Aug 2022 **Borusan Holding**
parcapazari.com
Project Role: Lead assessment officer
Duration: 30 days
 This consulting effort focuses on identifying the challenges of the current system, prioritizing renewal needs, and determining technology preferences for the renewal process.
- May 2021 – Jun 2021 **Koç Holding**
kocdiyalog.com
Project Role: Lead assessment officer
Duration: 20 days
 This consulting effort focuses on identifying the challenges of the current system, prioritizing renewal needs, and determining technology preferences for the renewal process.
- Feb 2021 – Mar 2021 **KoçAilem**
kocailem.com
Project Role: Lead assessment officer
Duration: 20 days
 This consulting effort focuses on identifying the challenges of the current system, prioritizing renewal needs, and determining technology preferences for the renewal process.

Projects

- Jan 2025 – Apr 2025 **KAI (KoçSistem AI)**
Project role: Team member
 Contributed to the development of KAI, an AI-powered digital assistant designed by KoçSistem to support enterprise-wide digital transformation. KAI delivers personalized user experiences across various domains including HR, customer service, operations, and data analytics. My role involved working on advanced features such as natural language processing, continuous learning, and proactive recommendation systems. The solution supports multilingual communication, seamless integration with existing platforms, and ensures full compliance with data privacy regulations (e.g., KVKK), providing organizations with a smart, scalable, and secure digital co-worker.
- Apr 2024 – Jan 2025 **KoçGPT**
Project role: Team member
 The KoçGPT project is an artificial intelligence initiative designed for universal use, with additional capabilities tailored specifically for Koç Holding employees. This project utilizes the Azure Chat API infrastructure to provide customized assistants based on specific transactions.
 Technologies used: Azure Search, Azure Cosmos, Azure Speech, Azure APIM, Azure Cognitive, Azure Functions, C#, Redis
- Aug 2023 – Feb 2024 **Datamus**
datamus.kocsistem.com.tr
Project role: Leader of the development team, development in areas of deep expertise
 An application with flexibility and multi-tenancy has been created for use by all Koç Holding companies. This application measures and reports Agile and DevOps metrics for all development teams, identifying areas for improvement based on retrospective analysis.
 Technologies used: C#, Entity Framework, Unit OF Work, Design Patterns, MSSQL, React, Redis, jQuery, Javascript, N-Tier Programming Architecture, Cloud Architecture, Azure Functions, MicroService Architecture, Value Stream Mapping
- Sep 2022 – Aug 2023 **OneFrame Notification Hub**
Project role: Leader of the development team, development in areas of deep expertise
 The OneFrame notification center project is designed to serve multiple customers by integrating with various information systems operated by companies. It supports SMS, email, and push notifications, and has demonstrated a savings of 30 man-days in project and development processes.

Technologies used: C#, Entity Framework, Unit OF Work, Design Patterns, MSSQL, React, jQuery, Javascript, N-Tier Programming Architecture, Cloud Architecture, Azure Functions, MicroService Architecture

Jan 2019 – Present

OneFrame Framework

oneframe.kocsistem.com.tr

Project role: Leader of the development team, development in areas of deep expertise

KoçSistem is a framework created to serve as a common architecture for future projects. It includes the development of templates, NuGet packages, and sample applications.

Technologies used: C#, Entity Framework, Design Patterns, MSSQL, Cassandra, React, Windows Service, N-Tier Programming Architecture, RabbitMq, ElasticSearch, Nuxeo Document System, ASP.Net Core and more

Jul 2022 – Nov 2022

Online Assessment Portal

assessment.kocsistem.com.tr

Project role: Leader of the development team, development in areas of deep expertise

This platform allows you to evaluate the maturity of your current project or team. It offers tests for Software, DevOps, UI/UX, and Agile Maturity.

Technologies used: C#, Entity Framework, Unit OF Work, Design Patterns, MSSQL, React, jQuery, Javascript, N-Tier Programming Architecture, Cloud Architecture, Azure Functions

Sep 2019 – Oct 2020

Semtpati

semtpati.com

Project role: Technical leader

This is a volunteer project developed in partnership with the municipality of Istanbul to track and feed stray animals.

Technologies used: C#, Entity Framework, Unit OF Work, Design Patterns, MSSQL, React, jQuery, Javascript, N-Tier Programming Architecture, Cloud Architecture, IOS, Android

Feb 2019 – May 2019

PixageOne Digital Signage

pixage.com.tr

Project role: Technical leader

Pixage 4 Overview:

Pixage 4 is a new-generation digital signage solution with advanced features. It offers a horizontally and vertically distributable server architecture, web-based administration with a unique responsive design, real-time monitoring of player activity and screenshots, a VLC media player back-end, and player support for both Windows and Unix platforms. Additionally, it provides real-time content management and supports UHD and 4K.

Technologies used: PCF, C#, Entity Framework, Design Patterns, MSSQL, Asp.Net Core, Windows Service, React, NodeJS, QT5, N-Tier Programming Architecture, Cloud Architecture, Elastic Search, Nuxeo Document System

Jan 2018 – Jan 2019

Koç Schools - Koç High School

Project role: Technical leader, senior developer

This is the management application for Koç School. It provides comprehensive management in various areas such as information, announcements, and attendance procedures for students, parents, and Koç School employees.

Technologies used: C#, Entity Framework, Unit of Work, Design Patterns, MSSQL, MVC, Windows Service, jQuery, Javascript, N-Tier Programming Architecture, Cloud Architecture.

May 2018 – Aug 2018

Zer - DMP Integration

Project role: Technical leader

This application is designed and offered as a service to provide the infrastructure for distributing the data collected by the BlueKai application to its customers in a suitable format. It examines, evaluates, and reports on 50GB+ of data daily.

Technologies used: C#, Entity Framework, Design Patterns, MSSQL, Cassandra, React, Windows Service, N-Tier Programming Architecture, RabbitMQ, ASP.Net Core.

Feb 2016 – Feb 2018

Pixage 4

pixage.com.tr

Project role: Technical leader, senior developer

This new-generation digital signage solution comes with advanced features, including a horizontally and vertically distributable server architecture, web-based administration with a unique responsive design, real-time monitoring of player activity and screenshots, a VLC media player back-end, and player support for both Windows and Unix platforms. It also includes real-time content management, and UHD and 4K support.

Technologies used: C#, Entity Framework, Castle Windsor, Node.js, QT5, WebAPI, MSSQL, RabbitMQ, Redis, ASP.Net MVC, N-Tier Programming Architecture, Cloud Architecture.

Mar 2015 – Mar 2016

KoçSistem e-Archive Solution

edevlet.kocsistem.com.tr

Project role: Technical leader, senior developer

This project enables electronic invoice printing for companies that are not e-invoice payers under the new scope of the state's e-invoice project. It manages e-Archive invoices by receiving, storing, and generating reports during the reporting period. Designed for a "Cloud" environment, the system can also be deployed "On-Premise." All workflows can be automated, while allowing customers to manage them manually as needed.

Technologies used: C#, Entity Framework, Unit of Work, Design Patterns, SAP Solutions, MSSQL, MVC, Windows Service, WCF, XML Web Services, jQuery, Javascript, Schematron, HSM, Tubitak ESYA Signature Library, N-Tier Programming Architecture, Cloud Architecture.

Jan 2015 – Mar 2015

Pixage Perimeter Board 2

Project role: Technical leader, senior developer

Adaptable and flexible Digital Perimeter Board administration software with features including multi-board management, live content triggering, remote content management, playback reporting, and more.

The system is used for advertising management of the field edge of the stadiums.

Technologies used: C#, WPF, Socket Programming

Mar 2014 – Dec 2014

KoçSistem e-Ledger Solution

edevlet.kocsistem.com.tr

Project role: Technical leader, senior developer

This project converts financially written books into an electronic format within the scope of e-Ledger. It retrieves files from any ERP system using WCF (Streaming), XML Web Service, or FTP methods, and prepares an e-Ledger in the format specified by the GİB. Designed for a "Cloud" environment, the system can also be used "On-Premise" in any installation. Beyond preparing the e-Ledger, the project includes features for archiving, backing up, reporting, displaying defects, and searching information from e-Books based on specific criteria.

Technologies used: C#, Entity Framework, Unit of Work, Design Patterns, SAP Solutions, MSSQL, MVC, Windows Service, WCF, XML Web Services, jQuery, Javascript, Schematron, HSM, Tubitak ESYA Signature Library, N-Tier Programming Architecture, Cloud Architecture.

May 2013 – Dec 2013

Ticketing Project

Project role: Technical leader, senior developer

This project records incoming calls to D-Smart's call center and manages in-house requests. It establishes a step-by-step system that guides users in addressing and resolving issues. If the system determines that the user cannot solve the problem, it directs the ticket to the appropriate units to ensure the customer's problem is resolved as quickly as possible.

Technologies used: C#, Entity Framework, MSSQL, ASP.Net, Windows Services, WCF Service, jQuery, Javascript, N-Tier Programming Architecture.

Apr 2013 – Dec 2013

SMS Management Project

Project role: Senior developer

This project enables D-Smart to replace its existing SMS systems, allowing for the capture, sending, reporting, archiving, and management of SMS traffic for all existing systems. The system is capable of sending and managing over 200,000 messages per hour.

Technologies used: C#, Entity Framework, MSSQL, ASP.Net, Windows Services, WCF Service, jQuery, Javascript, N-Tier Programming Architecture.

Apr 2013 – Jun 2013

Attachment Project

Project role: Senior developer

This file management project is designed for use in D-Smart's current or future systems. The project's aim is to allow D-Smart, D-Smart Dealers, or other locations to send files to D-Smart after undergoing necessary control and security checks and system acceptance, as well as to archive the files. All systems requiring files can access the uploaded files using the required parameters.

Technologies used: C#, Entity Framework, MSSQL, ASP.Net, XML Web Services, jQuery, Javascript, N-Tier Programming Architecture.

Sep 2012 – Mar 2013

D-Smart Agent Desktop

Project role: Senior developer

This project consolidates call center systems under one roof without disrupting existing structures, currently supporting approximately 1,500 active users. Since its implementation, the project has achieved a 70% increase in call reception and transaction completion speeds.

Technologies used: C#, Entity Framework, MSSQL, ASP.Net, Windows Programming, LDAP, XML Web Services, jQuery, Javascript, N-Tier Programming Architecture.