

Mert Yaşın

Senior Software Engineer

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EXPERIENCE

Cypher Games

Lead Backend Engineer

İstanbul, Turkey

10/2024 – Present

- Architected and built the backend of [Match Squad](#), a mobile match-3 game, from scratch using .NET, SignalR for real-time multiplayer & live chat, MongoDB, and Redis for horizontal scaling
- Developed LiveOps event infrastructure with automatic scheduling, matchmaking, and real-time leaderboards
- Implemented a LiveOps dashboard (React, TypeScript) for managing events, players, teams, and server configuration
- Built and maintained production infrastructure with Terraform-managed AWS deployments (ECS Fargate, ALB), custom distributed job scheduler, automated load testing with k6 using TypeScript code generation from SignalR hub, OpenTelemetry observability (Prometheus, Jaeger), and zero-downtime deployments

Kranz Wolfe Associates

Software Consultant, Contract

Belgium, Malaysia, Turkey (Remote)

08/2024 – 10/2024

- Modeled factory production pipelines for steel manufacturing using [DELMIA Quintiq](#) Scheduler, collaborating with business consultants to deliver scheduling plans and supply chain optimization recommendations

VenueX

Senior Software Engineer

İstanbul, Turkey (Remote)

11/2021 – 12/2023

- Designed and maintained ETL pipelines (using AWS Lambda, S3) to consume store, product, and stock data from retail merchants. Developed a data feed diff tool using hashing and reduced the feed ingestion workload by over 80%
- Implemented robust data validation steps for the pipelines that continuously push processed retail merchant data to third-party APIs (Google Business Profile, Google Content API) in order to guarantee accurate and up-to-date product and location information on map and location providers (Google Maps, Google Merchant Center, Google Shopping)
- Developed and maintained backend RESTful APIs (NestJS, TypeScript) to handle merchant data logic and aggregation, with custom validations for data consistency. Developed dashboards, report pages (ReactJS, TypeScript, MUI), and data integration channels for partner merchants. Implemented end-to-end tests for user scenarios using Cypress
- Maintained and troubleshooted the Terraform-deployed infrastructure stack (EC2, ECS) and MongoDB database layer. Set up custom alerts (SNS) and notifications (to Slack) for early detection of infrastructure and database anomalies
- Authored the successful proposal of a [TEYDEB 1501 Grant for Industrial R&D projects](#) from TÜBİTAK. This project focuses on using the state-of-the-art Computer Vision (CV) and Large Language Model (LLM) techniques to batch process merchant data and store location review data (from Google Maps) to generate insights for the merchants

Olympos

Senior Software Engineer, Part-Time

Washington, United States (Remote)

04/2022 – 06/2022

- Investigated methodologies from machine learning literature to improve Olympos' propriety AI-powered tech talent matching algorithms. Worked on talent profiling, company profiling, and clustering problems

Wayne State University

Instructor, Graduate Teaching Assistant

Michigan, United States

08/2018 – 05/2021

- Instructor for *Problem Solving and Programming Laboratory* (C++)
- Teaching Assistant for *Introduction to Deep Learning* (Tensorflow), *Data Mining: Algorithms and Applications* (Python, R), *Intelligent Systems: Algorithms and Tools* (R, Weka), *Python Programming* (Python), *Introduction to Programming and Computation for Engineers* (MATLAB)

appliedAI

CTO

İstanbul, Turkey

06/2017 – 01/2018

- Led the technical team of a newly founded startup at the accelerator [Garanti BBVA Partners](#), coordinating core product development with the team, interns, and freelance developers
- Scaled the B2B data analytics and artificial intelligence solution platform appliedAI to 2700+ monthly active users
- Curated a niche database of 3000+ AI companies, detailing their application areas and customers via web crawling and organic user acquisition. Established a lead generation pipeline through PoC partnerships with potential vendors
- Migrated the front-end MVP from Angular to React
- Maintained the full stack of [appliedAI.com](#) using ReactJS, MobX, Django REST Framework, and PostgreSQL; achieved zero downtime deployments with Heroku
- Mentored junior developers in front-end development and web crawling
- Talked about *Quantifiable AI* at the [AI With The Best](#) online conference

ING Bank - OrangeLab

Machine Learning Consultant

İstanbul, Turkey

12/2016 – 01/2017

- Planned roadmaps for machine learning projects, collaborating with data warehouse and analytics teams to prepare training data and structure base models for preliminary predictions
 - Predictive maintenance of automated teller machines (ATMs)
 - Credit limit prediction of potential customers and credit limit management of current customers
 - Net promoter score (NPS) prediction of customers

NovaFortis Software Consulting

Software Engineer, Freelance

İzmir, Turkey

2015 – 2021

- Developed an e-Invoice Adaptor middleware to help companies transition accounting systems for compliance with the Turkish Revenue Administration's e-Invoice mandate. NovaFortis is used as a *private integrator* to issue e-Archive invoices and to prepare e-Ledgers as a part of the e-Transformation process
- Conducted surveys on evolving government regulations, designed projects, and implemented software solutions

KNS Information Technologies

Android Developer, Freelance

İstanbul, Turkey

03/2014 – 07/2017

- Developed 12+ Android (Java) applications to enhance shoppers' mall experiences, including CMS support for promoting mall events and campaigns, sending push notifications, and managing brand loyalty programs
- Implemented indoor location detection and navigation using Bluetooth Low Energy (BLE) beacons in shopping malls

Peak Games

Game Developer, Intern

İstanbul, Turkey

06/2015 – 09/2015

- Designed and implemented four 2D & 3D hypercasual games (Color Rush, Paper Dreams, Car Crossing, Tap to Aim) using open-source assets, and creating new models from scratch in Unity3D
- Built and monetized the gamification infrastructure for Peak Box with interstitial video ads
- Added localization support and multiple translations to Peak Box

Innova IT Solutions

Software Engineer, Intern

İstanbul, Turkey

06/2014 – 07/2014

- Interned at the Financial Transaction Applications department and developed a CRUD report portal integrated with Microsoft Reporting Services (SSRS) for an international bank using ASP.NET MVC 5
- Automated report generation for 30+ report types using Perl scripts and ASP.NET Razor (C# and HTML)

EDUCATION

Wayne State University

PhD ABD, Computer Science

Michigan, United States

2018 – 2021

- Successfully passed Ph.D. Qualifying Exam – 2020
- Research Projects:
 - Early seizure detection in neonatal brains with EEG data*; using structural & functional brain network models, and deep learning & wavelet-based methodologies to perform temporal & spectral analyses
 - Disease subtyping using genomic and clinical data*; integrating datasets from multiple cohorts, and identifying cancer subtypes via bioinformatics, data mining, and machine learning

Relevant Courses

- MGG 7010: Molecular Biology and Genetics
- CSC 7991: Introduction to Deep Learning
- CSC 7810: Data Mining: Algorithms and Applications
- CSC 7991: Advanced Cyber-Human Interactions
- CSC 8260: Seminar in Energy Efficient Mobile/Cloud Computing
- CSC 5430: Game Programming & Design
- PSY 5040: Cognitive Neuroscience
- CSC 6860: Digital Image Processing and Analysis
- CSC 5800: Intelligent Systems: Algorithms and Tools
- CSC 7991: Information Retrieval
- CSC 5591: Engineering Innovation and Entrepreneurship
- CSC 5591: Unix Security with Shell Programming

Boğaziçi University

Master of Science, Computer Engineering – Incomplete

İstanbul, Turkey

2016 – 2018

- Co-founded the reading group [Deep Learning Boundaries](#)
- Prepared and graded homework as a Student Assistant for [CmpE 300: Analysis of Algorithms](#)
- Attended the Convex Optimization reading group of the [Perceptual Intelligence Laboratory](#)
- Spoke at the [Ask Me Anything #machinelearning](#) event and the [Learning to Learn](#) panel

Relevant Courses

- CmpE 59M: Interaction Design
- CmpE 537: Computer Vision
- CmpE 547: Bayesian Statistics and Machine Learning
- CmpE 59H: Bioinformatics
- CmpE 557: Complex Systems
- IE 501: Optimization Techniques

- Attended a summer school focused on state-of-the-art Computer Vision applications in the industry and recent literature, with team-building activities such as ultimate frisbee, orienteering, climbing, archery, and unihockey

Boğaziçi University
Bachelor of Science, Computer Engineering

İstanbul, Turkey
2012 – 2016

- Honors: Dean's Honor List; GPA: 3.28 / 4.00
- Implemented recurrent neural networks (RNNs and LSTMs) in Python from scratch and generated new poems, plays in the style of William Shakespeare and Nazim Hikmet for my [Bachelor Thesis](#)
- Ranked 1st in the case study competition [All-Rounder](#) by designing a puzzle game – 2016
- Ranked 1st in Yıldız Technical University 5th [Finance and Software Days](#) Code Contest – 2014

Relevant Courses

- CmpE 544: Pattern Recognition
- CmpE 540: Principles of Artificial Intelligence
- CmpE 58Z: Introduction to Biometrics
- CmpE 545: Artificial Neural Networks
- CmpE 482: Numerical Linear Algebra and Its Applications
- CmpE 489: Cognitive Science

Özel Ege Lisesi
High School

İzmir, Turkey
2008 – 2012

- Represented Slovenia in the SOCHUM Committee of [Harvard National Model United Nations \(HNMUN\)](#) – 2011
- Led the winning team at İzmir Gelişim College's Mathematics League – 2011 & 2012
- Won two medals at University of Waterloo's [math contests](#) – 2011 & 2012
- Participated in [American Mathematics Competition](#) and [National Antalya Mathematics Olympics](#) – 2010 & 2011

SKILLS

game-dev & mobile	• Unity3D; C# • Godot; GDScript • Android; Java • React Native
machine learning	• Deep Learning • Computer Vision • Natural Language Processing • Recurrent Neural Networks
	• Transfer Learning • Reinforcement Learning • Bioinformatics • Digital Signal Processing
data science	• Python; TensorFlow, Keras, PyTorch, NumPy, Pandas • MATLAB • R
front-end	• React.js • Angular • Next.js • MobX, Easy Peasy • MUI, Semantic UI, Tailwind, DaisyUI
back-end	• NestJS • Node.js • TypeScript • Python; Django, Flask • Java; Spring • C#, ASP.NET, SignalR
dev-ops	• MongoDB, PostgreSQL, MySQL • Redis • BullMQ, RabbitMQ • Prometheus, Jaeger, New Relic
others	• AWS; EC2, ECS Fargate, ALB, S3, Lambda, DynamoDB • Terraform, CDKTF • Docker • Grafana k6

EXTRACURRICULAR

- Ranked 1st at [inzva's AI Projects #7](#) with the project [Deep Learning for Procedural Pattern Generation](#) – 01/2022
- Co-founded the volunteer alumni community, Boğaziçi University International Community ([BOYUT](#)) – 01/2021
- Running, cooking, cycling, swimming, playing guitar, playing video games, developing video games, *learning to learn*
- Languages: Turkish (Native), English (Fluent), Macedonian (Pre-Intermediate), Dutch (Beginner)