

Muhammed Can Küçükaslan

Backend Software Engineer

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Education

2019 – 2024 **Bilkent University**, B.S. in **Computer Engineering**, **3.66/4.00**
Bilkent University, Faculty of Engineering, Ankara, Turkey.

- Graduated with ***Magna Cum Laude*** and ranked in *top 10%*.
- Comprehensive Scholarship (100% Tuition Waiver)

2019 – 2024 **Bilkent University**, B.S. in **Mathematics** (double major), **3.65/4.00**

- Graduated with *Magna Cum Laude*.

Work Experience

Feb. 2025 - **Getir Turkish Decacorn**
now **Backend Engineer II (Mid)**

- Led IoT integration with device-specific communication protocols for GetirWater car tracking system on highly scalable and performant **Java & Go microservices**.
- Managing internal OSRM deployments and customizing it to *utilize the historical delivery data and gps traces* using AirFlow, **PostgreSQL**, Redis etc.
- Migrated, in a joint effort, an internal vehicle routing service from Python to C++ to achieve **2x performance**, while saving **\$10000s** of recurring monthly costs.
- Deployment of new infrastructure (Kafka, MongoDB, Kubernetes, AWS EC2) with appropriate ACL settings using Terraform.
- Migrating existing CI/CD from Bitbucket Pipelines to GitHub actions.
- Prepared company-wide tutorials on MongoDB upgrades for NodeJS projects, improving cross-team knowledge sharing.

Jan. 2024 - **Backend Engineer I - Java (Junior)**

Jan. 2025 (1 year)

- Maintenance (new feature implementations, bug fixes, dependency and language version migrations) for *RESTful microservices* written in **Java/Spring**.
- Used **JUnit**, WireMock, Embedded Redis, H2 database, *datafaker* etc. for testing.
- Used Shedlock for distributed (cron)job scheduling.
- Used Apache Kafka, Redis, MongoDB, **AWS Lambda**, Docker, Kubernetes, Bitbucket Pipelines.
- Design and implementation of courier rewarding (& gamification) service in **Go** with **Go-kit** with RESTful microservice architecture using Apache Kafka and Flink.
- Optimized, in a joint effort, MongoDB usage to dramatically improve certain query performances, database migrations/consolidations, and **reduce monthly database costs** by **\$2000+**.

July 2023 - **OTO Global (Remote) Backend Engineering Intern & Part Time**

Nov. 2023 (5 months)

- Developed backend systems using **Java & Spring**, deployed on Google Cloud Run (GCR) & Compute Engine with **Docker** images built with **Jib**.
- Gained experience with MySQL and Redis, Google Pub/Sub.
- Utilized Logging and GCR Metrics to identify and resolve anomalies and bugs.

June 2022 - **Peak Games (1st Turkish Unicorn) Big Data Platform Engineering Intern**

Sep. 2022 I worked on the development of [s5cmd](#) written in **Go**. [s5cmd](#) is a command line application used for cloud storage operations, particularly for AWS S3.

- Implement extensive shell completion for zsh, bash and pwsh [#500 · peak/s5cmd \(github.com\)](#)
- Implement versioning support for S3 compatible file systems [#475 · peak/s5cmd \(github.com\)](#)
- Refactor sync command to handle sync of directories with millions of files under limited RAM [#483 · peak/s5cmd \(github.com\)](#)
- Identified and fixed a subtle path manipulation bug [#456](#)

and more at [Pull requests · peak/s5cmd \(github.com\)](#).

Projects

PoCSequentiality	A <i>Proof of Concept</i> to take advantage of sequential writes over random writes for <i>large file downloads</i> from AWS S3-compatible file systems written in Go . Hosted at github.com/kucukaslan/PoCSequentiality
Todo: <i>todo</i> is a to do list application for CLIs	It is a simple and lightweight to do list application written in Go. It has exactly the main features. It is hosted at github.com/Kucukaslan/todo . It uses <i>GitHub Actions</i> and <i>GoReleaser</i> for CI/CD, brew tap is provided.

Skills

Languages	English (Academic/Professional Proficiency) Turkish (Native)
Programming languages	Go (Goroutine / channel patterns, Go-kit, urfave/cli) Java (Spring, OOP design patterns) Python (Familiar with ortools, numpy, pandas, FastApi) C/C++, PHP, SQL, NoSQL (MongoQL, Redis)
Various development tools and environments	Git (GitHub, BitBucket and GitKraken) PostgreSQL , MariaDB, SQL Express, MongoDB CSV, JSON, Protocol Buffers, Avro Apache Kafka , Google Pub/Sub Docker , Kubernetes CI/CD (GitHub Actions, BitBucket) pipelines AWS (EC2/S3), Google Cloud (Run, Storage) [GCP]

Other Information

Achievements & Rewards

- Bilkent University Comprehensive **Scholarship** Student (includes *100% tuition waiver* and stipends), 2019-2024.
- Ranked **568th** in “YKS” among over **2 million candidates**, in “Sayısal” (lit. Quantitative), **123rd** in “Sözel” (lit. Verbal), **475th** in English.
- Bilkent University *High Honor* Certificates in **Computer Eng.** (7x), in **Mathematics** (6x).
- Bilkent University *Honor* Certificates in **Computer Eng.** (2x), in **Mathematics** (once).

Certificates

- **Go: The Complete Developer's Guide (Golang)** by *Stephen Grider*
Certificate no: UC-c48f8569-b251-45f8-a057-3d491de174ca