

# Nurgazy Nazhimidinov

Ankara, Turkey  
+(90) 541 939 38 92  
[nurgasemetey@gmail.com](mailto:nurgasemetey@gmail.com)  
<http://nurgasemetey.com>  
<https://github.com/nurgasemetey>

## Experience

Sep 2018 → Current **Tech Lead** – Paraboly

pandas, java, python, apache-beam, google-dataflow, osrm, fastapi, spring-boot, ctypes, google-cloud-pubsub, rabbitmq, kubernetes, openapi, swagger, microservices, apache-kafka, node.js, geoserver, mongodb, keycloak, google-cloud-build, gitlab-ci, nestjs, typescript, elasticsearch, redis, tdd, junit5

- Worked on scaling travel time algorithm on GPS data received from 300k cars each minute. Used Apache Beam, Google Dataflow, Google PubSub, Geoserver.
- Worked on development of public transportation analytics platform. Used FastAPI and PostgreSQL.
- Designed and architected backend for traffic assistant platform. Used Kubernetes, Google PubSub, Nodejs, Redis
- Designed and developed backend applications written as microservices for ERP of government structure. Used Spring Boot, PostgreSQL, MongoDB, Keycloak, Elastic Search
- Developed routing application for bicycle routes. Used OSRM, Kubernetes
- Designed and developing backend of road accident analytics platform. Using FastAPI and PostgreSQL.
- Worked on implementation travel time algorithm. Use pandas and OSRM.
- Extended Python bindings for OSRM which didn't have map-matching function. Used ctypes
- Worked on implementation of bus station matching algorithm using smart-card data that uses map-matching library. Used pandas and OSRM.
- Implemented bus station matching algorithm using smart-card data. Used pandas.
- Lead team to use OpenAPI(Swagger) and generate client SDKs for backend applications.
- Used Google Cloud Build and Gitlab CI for CI/CD
- Developed backend for license management. Used Typescript, NestJS.

As tech lead, I am responsible for

- designing initial architecture of new products
- translating business requirements to technical requirements
- monitoring code quality and documentation

Sep 2016 → Sep 2018 **Senior software engineer** – Paraboly

mysql, cassandra, qt, flask, opencv, java, c++, ansible, python, mongodb, mapnik, node.js, rabbitmq, microservices

- Designed and developed parking violation application that would run on embedded device. Used QT, OpenCV, OCR provided by third-party and Ansible. Ansible was used to automate deployment to multiple devices.
- Designed and developed road incident detection application using Floating Car Data. Used Spring Boot, MySQL. Daily number of data was 50 million.
- Improved data storage of Floating Car Data by moving from MySQL to Apache Cassandra.
- Designed and developed application for detecting traffic patterns in city roads using Floating Car Data. Used Flask and MongoDB.
- Designed and developed tile rendering application for representing road speeds on map. Used Mapnik and Flask.
- Designed and developed vehicle priority backend application for emergency vehicles that would pass on green light. Used Spring Boot and MongoDB.
- Designed and developed workflow automation for different type of devices in smart city system. Used NodeJS and MongoDB.
- Designed and developed application to monitor and detect real-time car queues on intersections using Floating Car Data. Used Spring Boot and MongoDB.

Non-technical responsibilities

- code review
- mentoring junior software engineers

---

*Jun 2015 → Sep 2016* **Software engineer** – Paraboly

spring-boot, mysql, spring-cloud, netflix-zuul, docker, docker-compose, java, spring-mvc, tomcat, zeromq, oauth-2.0, mongodb, docker-swarm, rabbitmq, microservices, redis

- Designed and developed backend for tunnel accident system. Used Spring MVC, MySQL and ZeroMQ.
- Designed and developed authorization and authentication backend microservice application for smart city system which would support OAuth2. Used MongoDB and Spring Boot.
- Designed and developed API gateway for smart city system. Used Spring Cloud and Zuul.
- Designed and developed junction control management backend microservice application that would run on smart city system. Used Spring Cloud, MongoDB and Spring Boot.
- Designed and developed main architecture of smart city system. Used Docker, Docker Swarm, RabbitMQ and Redis

---

*Sep 2014 → Jun 2015* **Part-time software engineer** – Paraboly

android, java, spring-mvc, mysql, rest

- Developed Android mobile application for hospital information system. I was responsible for implementing screens and integrating to backend part of system.
- Developed backend on Spring MVC for mobility research project where sensors from car would send data. Used MySQL as database.
- Maintained junction control management system backend which was written on Spring MVC. Used MySQL as database.

---

*Jun 2014 → Aug 2014* **Intern software engineer** – ISSD

android, java, android-kernel, rest

- Developed Android mobile application for motormans. Integrated to backend.
- Integrated touch screen device for kiosk device. Mainly compilation Android kernel with configuration mentioned in device manual.

---

*Sep 2011 → Jan 2016* **B.S. Computer Engineering** – METU

## Education