

CURRICULUM VITAE

English (Advanced), **Turkish** (Native), **French** (Pre-Intermediate), **Latin** (Elementary)

Paris, France

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TECHNOLOGIES AND INTERESTS

Technologies: Go, Python, Kubernetes, Docker, Redis, PostgreSQL, Linux, Swagger, REST API.

Interests: Austrian School of Economics, Music Theory, Piano, Chess, Latin, Lego Technic.

EDUCATION

Sorbonne University

Master of Science in Distributed and Cloud Computing

September 2022 - Present

Paris, France

- Awarded SFRI Scholarship from Sorbonne University.

Bilkent University

Bachelor of Science in Computer Science and Engineering

September 2017 - January 2022

Ankara, Turkey

- Graduated with honors, *summa cum laude*.

EMPLOYMENT EXPERIENCE

LIP6 Research Laboratory, Dioptra Team

Open-Source Contributor / Software Developer

June 2021 - Present

Paris, France

- Maintaining the open-source *EdgeNet Software* which is a suite of custom controllers written in Go for Kubernetes cluster that serves state-of-the-art computer networking research.
- Improving a proof-of-concept Kubernetes federation extension by optimizing the mechanism for resource cache management.
- Current implementation and experiments are still ongoing, the results will be published in an academic paper soon.

ArgosAI Technology

Research Engineer

August 2021 - August 2022

Ankara, Turkey

- Proposed and implemented a novel *Generative AI model* architecture using *Python* and *PyTorch* that is used for dataset generation which significantly reduced the downtime caused by foreign object debris placement on international airports.
- Integrated *Kubernetes* with *KubeFlow* in the office servers that maximized GPU utilization during model training.

Borda Technologies

Full Stack Software Developer

June 2020 - August 2021

Remote

- Implemented a full stack task assignment API and frontend using *C# ASP.NET Core* and *Flutter* that is utilized in more than 20+ client hospitals.
- Proposed and implemented a virus infection tracking algorithm using *AWS lambda* backend and *Flutter* frontend for reducing spread in the office environment that is used during the pandemic.
- Selected as one of 4 software engineers among 2500+ candidates in the mentorship program.

University of Mississippi NCCHE*Short Term Visiting Scholar**July 2019 - August 2019**Oxford, US*

- Studied parallel computing algorithms and different libraries used in NCCHE's disaster simulation software.
- Developed a geography-aware navigation API using Python, *GDAL* and *OGR* that solves parallelized travelling salesmen problem.

TECHNICAL PROJECTS

Live Container Migration*September 2022 - January 2023**First Year Master Project*

- Designed and implemented a Kubernetes extension with Go for supporting live container migration using *CRIU* and *Containerd*. The final report can be found [here](#).

Pandetect*Sptember 2020 - July 2021**Graduation Project*

- Developed an image analysis API using *Typescript* and *Python* in *Docker* containers to find un-masked people in public spaces during the pandemic.
- Designed and implemented a basic image streaming protocol in C for the *ESP32-Cam* microchip to support image streaming using the local network.

Depth-Aware 3D Crowd Pose Estimator*January 2020 - July 2020**Research Project*

- Proposed, implemented and trained an AI model using *Python* and *PyTorch* to estimate 3D skeletal poses of people from single shot images of sport events.

Other projects can be found on my *github*.

VOLUNTARY PROJECTS

AIESEC-SAMS18 (Stay a While Make a Smile)*June 2018 - July 2018**Volunteer**Skopje, North Macedonia*

- Organized tours, activities, and lectures to teach English to unprivileged children in SOS Children's Village in North Macedonia.

Code Education for Kids*November 2018 - January 2018**Volunteer**Ankara, Turkey*

- Introduced young elementary school students the programming concepts using *Scratch*.

REFERENCES

Professor Olivier Fourmaux

Director of Master of Computer Science in Sorbonne University

Paris, France

- My current co-supervisor in LIP6 Dioptra Team.

Senior Software Engineer Berat Can Şenel

REEZOCAR

Paris, France

- My mentor in LIP6 Dioptra Team.

Associate Professor Timur Friedman

Professor of Computer Science in Sorbonne Univeristy

Paris, France

- My current co-supervisor in LIP6 Dioptra Team.

Prof. Dr. Mustafa Altınakar

Senior Computational Hydroscience Engineer at Argonne National Laboratory

Lemont, US

- My supervisor and mentor in NCCHE.