

# CURRICULUM VITAE

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

LinkedIn: *Ufuk Bombar*  
Email: *ufukbombar@gmail.com*

Github: *ubombar*  
Phone: +33 7 65 84 18 95

## 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**

*September 2020 - July 2021*

*Graduation Project*

- Developed an image analysis API using *Typescript* and *Python* in *Docker* containers to find unmasked 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*.

## ADDITIONAL INFORMATION

---

**Technologies:** Go, Python, Prometheus, Redis, Swagger, Git, PostgreSQL, Kubernetes, Docker, Linux.

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

## REFERENCES

---

### **Prof. Olivier Fourmaux**

*Director of Master of Computer Science in Sorbonne University*

*Paris, France*

- My current co-supervisor in LIP6 Dioptra Team.

### **Prof. Timur Friedman**

*Professor of Computer Science in Sorbonne University*

*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.