# $Ege\ Erdogan\ \underline{\rm ege@erdogan.dev}\ |\ \underline{\rm linkedin/ege-erdogan}\ |\ \underline{\rm github/ege-erdogan}\ |$

Updated March 9, 2021. See erdogan.dev/resume for latest version.

#### **EDUCATION**

Koç University (GPA: 3.53/4)

Istanbul, Turkey 2017 - Present

Double major in Computer Engineering & Mathematics

Cryptography, Security, and Theory specialization program (3.88/4)

Dean's Honor Roll (3 semesters) and Vehbi Koc Scholar (1 semester) for academic achievement.

Üsküdar American Academy

Istanbul, Turkey 2012 – 2017

High School

EXPERIENCE

Undergraduate Tutor

Feb. 2021 – Present

Istanbul, Turkey

Istanbul, Turkey

Koç University

• Holding weekly tutoring sessions helping with course administration for the *Computer Networks* course.

Research Intern

July 2020 - Present

Koç University

• Supervisor: Assoc. Prof. Alptekin Küpçü

- Working on a research project concerning the security of privacy-preserving machine learning technologies.
- Using Python and various ML libraries to implement privacy-preserving machine learning methods and attacks against them.

Undergraduate Teaching Assistant

Sep. 2020 – Jan. 2021

Koç University

Proteams

Istanbul, Turkey

• Conducted weekly problem solving sessions and held office hours for the *Introduction* to *Programming with Python* course during the Fall 2020 semester.

Software Development Intern

 $July\ 2020-Aug.\ 2020$ 

Istanbul, Turkey

- Implemented features for different parts of a mobile application, including its back-end server, database, and admin panel.
- Worked with Java and the Spring framework for the backend, PostgreSQL for the database, and Angular for the admin panel.

Summer Intern

IBM

July 2019

Istanbul, Turkey

• Worked within the IBM Cloud & Cognitive team.

- Built a chatbot to answer questions by IBM new hires as a group with the other interns.
- Developed a music generation system using neural networks and built a web interface for it with the other interns. Worked with Python for machine learning and web development.

#### Software Development Intern

Feb. 2018 - April 2018

Istanbul, Turkey

Bitlo Cryptocurrency Exchange

• Started learning and gained experience using the Spring framework to build web applications. Gained practice with the Java language.

#### Projects

#### Brick-breaking Game | Java, Swing, MongoDB

- Developed a brick-breaking game as a group of 5 for the Software Engineering course at Koc University.
- Worked with Java Swing libraries for the visuals, and used MongoDB to save user statistics and save games.
- Gained experience with software development tools and methodologies such as agile development, UML diagrams, and design patterns.

#### Web-based News Reader | Ruby, Ruby on Rails, JavaScript

• Developed a web-based reader scraping and displaying content from Hacker News, Slashdot, and the r/programming subreddit as a solo project.

#### Course Projects

• Various course projects including Computer Networks, Operating Systems, and Digital Design courses among others can be found at https://github.com/ege-erdogan/coursework.

## ACTIVITIES

**Volunteer** | Koc University Entrepreneurship Society

2019-2020

- $\bullet$  Volunteered as a mentor for the  $Zero\ to\ One$  entr<br/>preneurship conference.
- Worked in the organization of the conference and was responsible of a group of guests on event day.

Member | Uskudar American Academy Percussion Group

2013-2017

- Was a member of the UAA percussion group.
- Participated in various concerts with the group in Belgium, Ankara, Izmir, and Istanbul.

### TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, Ruby, C, Scheme

Frameworks/Libraries

Machine learning: PyTorch, Numpy, Matplotlib, scikit-learn

Web: Ruby on Rails, Spring, Bootstrap

Tools/Platforms: Git, UML, AWS, IBM Cloud, design patterns

Areas of interest: Machine learning, cryptography, web development, computer networks, theoretical CS