

# Poyraz Yılan

Emails: yilanpoyraz@gmail.com - poyraz.yilan@polytechnique.edu

## EDUCATION

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### École Polytechnique (Institut Polytechnique de Paris)

M1 MPRI - Parisian Master of Research in Computer Science

- For more information: <https://wikimpri.dptinfo.ens-cachan.fr/doku.php>

Palaiseau, France

Sep. 2023 - Apr. 2024

### Atilim University

BS - Computer Engineering

GPA: 4.0/4.0

- Received 100% scholarship from the Higher Education Institution Examination (YKS).
- Graduated as valedictorian.

Ankara, Turkey

Sep. 2019 - May 2023

## RESEARCH EXPERIENCE

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### LASIGE

Worked with the FreeST programming language under the supervision of Professor Vasco T. Vasconcelos and Diogo Poças as part of an Erasmus+ Traineeship program at the Faculty of Sciences of the University of Lisbon.

Developed concurrent (message-passing) applications with the FreeST programming language.

Provided solutions for proposed problems.

Lisbon, Portugal

Jul. 2022 - Sep. 2022

### Undergraduate Research Project at Atilim University

Was part of a research team among other undergraduate students that created a communication system using lasers.

Was in charge of finding solutions to modulating the laser lights in the system.

Myself and three other members of our team presented the demo of the project at the "Research Day" event at Atilim University.

Ankara, Turkey

Feb. 2022 - Jun. 2022

## TEACHING EXPERIENCE

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### Atilim University

Instructed the lab lectures of Computer Programming I in two different sections.

Ankara, Turkey

Sep. 2022 - Jan. 2023

### Self Employed Teaching

Tutored other students in algorithms, data structures and programming languages in 1-on-1 lectures.

## OTHER RELEVANT EXPERIENCE

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Participated in **ICFP 2022** as a student volunteer.

Participated in **SPLASH 2022** as a student volunteer.

Recruited as a mentee in the Sigplan long term mentoring program.

## WORK EXPERIENCE

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### Akbaş Holding A.Ş.

- Developed an employee rating system to be used by department heads to create yearly reports for the board of directors. The technologies used for this were: C#, .NET MVC and JavaScript.

- Used SAP for basic operations.

Bursa, Turkey

Aug. 2021 - Sep. 2021

## PROJECTS

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### **SChess - Dynamic Chess (*Top 5 in the capstone project competition by the Turkish Informatics Association*)**

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SChess is an innovative online chess platform aimed at revitalizing traditional chess by reducing reliance on established theory and fostering creative gameplay. The platform uniquely generates a different chess variant for each match, combining three atomic rules from a comprehensive database. This initiative addresses the critical issue in high-level chess play where heavy reliance on theory diminishes creativity and raw talent, often leading to drawn games. At lower levels, it mitigates the imbalance of skill through unpredictability in gameplay.

#### *Key Features:*

- A robust database of unique, well-described chess rules.
  - An intelligent rule selection system ensuring compatibility and varied gameplay.
  - Cross-platform compatibility, it can be playable from the browser and also run natively on Windows, Android, macOS, iOS and Linux.
  - A multiplayer matchmaking system for balanced and fair competitive play.
  - A sandbox mode for players to experiment and customize rules.
  - An informative wiki page detailing each rule for strategic understanding.
  - Community engagement tools including a leaderboard, forum, and news updates.
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### **Turkish Poetry Esolang**

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Designed and programmed an original esoteric programming language that has a syntax indistinguishable from Turkish poetry. This programming language currently supports loops, if statements and {+,\*,-,%,==,<,>,!=} operators. Functions with recursion are planned to be added in the future. This programming language is created in C#. Also, ASP.NET is used to create a website that allows users to input their own source code and try it themselves.

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### **Console Window Animation Library**

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Created a library that allows users to easily create images and animation clips with color and place them freely on the x and y coordinates of the console window. The placed items can be animated to move to other coordinates at dynamic speed while continuing their local animations if they have any. Multiple items can be created and removed at the same time.

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### **LSB Steganography**

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Programmed a tool that uses the least significant bits of the rgb values in pixels of images to hide strings using Python.

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## SKILLS

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**Spoken Languages:** English - C1 (IELTS 8.0), German - A2, French - A1, Turkish - Native

**Programming Languages:** C, C++, C#, Python, OCaml, Agda, SQL

**Tools:** ASP.NET, SAP, Unity, Anaconda, PyTorch, TensorFlow