HAKAN EROGLU

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Interested in many aspects of programming, I am looking for an internship in computer science

Education

Colby College, Waterville, ME   **Bachelor of Arts**, May 2026
Major: Computer Science, Mathematical Sciences *Minor:* Art   **GPA: 3.51**
Honors: Presidential Scholar (Awarded to most promising incoming freshmen)
Relevant Coursework: Algorithms and Data Structures, Data Analysis and Visualization, Linear Algebra,
Algorithmic Game Theory, Logic and Argumentation

Skills

Language(s):
  Native Turkish, Professional English, Basic German.
Soft Skills:
  Communication, Problem-solving, Adaptability, Attention to Detail, Creativity
Programming Languages:
  C#, Python, Java, HTML, CSS, JavaScript, C
Frameworks, Engines and Libraries:
  NumPy, pandas, SASS, Godot, Unity
Currently Learning:
  Dart, Flutter, R, React Native

Work Experiences and Activities

Colby College Computer Science department, Grader for CS231   Fall 2023 - Present
  ● Grading students' projects in the Algorithms and Data Structures class
  ● Providing feedback to improve students' coding skills and knowledge

Colby Animation Society, Co-President and Treasurer   Fall 2023 - Present
  ● Leading weekly meetings and monthly activities for our over 100 club members along with the president.
  ● Creating a space to spark up conversations and make connections
  ● Writing and sending emails to club members over the course of the school year to let club activities known
  ● Budgeting money for the club activities, including competitions and a 2-day trip to Boston for a 15-person
    group using only %90 of last year's budget

Projects

Minecraft-like game in **C#** [GitHub]   September 2023
  ● Developed a basic clone of the game "Minecraft" in a week as a coding challenge for myself
  ● Taught myself programming concepts such as multithreading and 3D Graphics
  ● Leveraged Godot Engine to create a random 3D World that can be edited by the player
  ● Made the code understandable, maintainable and open to future expansions

Extended Marching Squares Algorithm in **JavaScript (p5js)** [GitHub, Link]   July 2023
  ● Designed an algorithm for approximating the shape of a 2D field.
  ● Raised the accuracy of the approximation by employing 2 thresholds instead of 1 present in the standard
    Marching Squares algorithm, allowing for both smooth and sharp corners
  ● Built a basic UI allowing people to play around with parameters and see how the algorithm changes

Arrangement of a Deranged Set and Examination of Its Properties   March 2020
  ● Won first place in the regionals of a prestigious Mathematics Project competition in Turkey with this project
  ● Worked on the project collaboratively with my teammate to write up a paper
  ● Found previously unknown connections between derangements and other mathematical sets

Pathfinding Simulation in **Java** [GitHub]   November 2022
  ● Went beyond the scope of this coursework for Data Structures and Algorithms class.
  ● Improved the graphics to be visually pleasing and added a maze generation algorithm
  ● Utilized Swing library to create a flexible and understandable GUI
  ● Implemented a random maze generation algorithm using Depth First Search
  ● Applied good coding principles to make the code easy to understand