

Benjamin D. Porter

bporter@cs.utexas.edu +1 (979) 450-5870 github.com/bporter816 linkedin.com/in/bporter816

EDUCATION

The University of Texas at Austin

2017 - 2021

Pursuing B.S. in Computer Science (Honors)

GPA: 3.38

Turing Scholars Honors Program

Current coursework: Computer Organization/Architecture (H), Competitive Programming

Past coursework: Algorithms and Data Structures (H), Discrete Mathematics (H), Integral/Multivariable Calculus

EXPERIENCE

Research Intern - Parasol Laboratory, Texas A&M University

Jun. - Aug. 2016

- Applied sampling-based motion planning to predict ligand binding sites on a protein surface
- Implemented metrics in C++ using Parasol Motion Planning Library (PMPL) to gauge candidate binding sites' favorability, parsing protein database files and writing metrics to text files
- Proposed future application of metrics as features in a neural network approach
- Attending weekly group meetings and regular talks/thesis defenses
- Adhered to code quality standards and performed code reviews/check ins
- Compiled a technical report and poster and presented findings at undergraduate research symposium

PERSONAL PROJECTS

Web Crawler and Search Engine

Nov. - Dec. 2017

- Implemented a simple web crawler and search query engine in Java
- Designed a web index using inverted indexing and a query language with precedence order and logical operations
- Developed a comprehensive testing framework, using graph algorithms to model pages and links and using JUnit to automate testing

Pest Control - Team Lead

Nov. 2016 - Apr. 2017

- Developed a video game in which the player takes on the role of a cockroach in a team of four using the Unity3D engine
- Wrote mechanics for players to walk on walls and implemented user interface elements
- Facilitated effective communication and organized team meetings

Tetris

Oct. 2017

- Implemented Tetris game mechanics in Java, such as rotations and resolution of collisions
- Built a simple AI to play Tetris by weighting the possible moves and selecting the optimal choice

Judge for Programming Contests

Jan. 2018 - present

- Developing a framework in Node.js and Express to judge submissions in programming contests

HONORS

Leo and Catherine E. Schein Memorial Scholarship

Fall 2017, Spring 2018

- Endowed scholarship from the Department of Computer Science for distinguished undergraduates in the Turing Scholars program

SKILLS

Proficient: Java, Git, \LaTeX , Unity3D

Familiar: C/C++, Javascript frameworks, web frontend

Operating systems: Linux, Windows

EXTRACURRICULAR ACTIVITIES

Competitive programming, Association of Computing Machinery, Information and Systems Security Society

HIGH SCHOOL ACTIVITIES

National Merit Semifinalist

UIL Computer Science competitor