

# Benjamin Kelly

COMPUTER SCIENCE AND GAME DESIGN STUDENT

377 Main Street Concord MA, 01742

☎ (339)-203-8195 | ✉ benjaminkelly@me.com | 📱 benkelly99

## Education

### Rensselaer Polytechnic Institute

B.S. in Computer Science and Game Design

- GPA: 4.0/4.0

Troy, NY

Aug. 2018 - May 2022 (Projected)

## Skills

### Programming

C/C++, C#, Java, Python, Linux, Unity3D, Unreal Engine 4, OpenGL

### Coursework

Introduction to Algorithms, Game Architecture, Linear Algebra, Game Development 1, Introduction to Artificial Intelligence, Operating Systems, Application Programming in Java

## Experience

### Rensselaer Polytechnic Institute

Undergraduate Researcher

Troy, NY

May 2020 - Present

- Worked with the HEALS project, a collaboration between IBM and RPI to use artificial intelligence and semantic web technologies to aid in determining treatment for patients with diabetes.
- Helped design and implement a UI interface for physicians' use in exploring treatment options.
- Integrated UI service with patient RDF graphs by designing RDF structure and querying using SPARQL.
- Helped design and verify unit tests for an ontology autonomic deduction tool within whyis, a graph creation and reasoner tool

### Boston Biomedical Inc.

Commercial IT Intern

Cambridge, MA

Jun. 2019 - Aug. 2019

- Developed an integration strategy between company website and Workday applicant tracking system.
- Redesigned the company's online career page.
- Communicated with human resources and marketing team to gather requirements for the website and ensure easy transition to the new system.

### Rensselaer Polytechnic Institute

Undergraduate TA for Data Structures and Principles of Software

Troy, NY

Jan. 2019 - Present

- For Data Structures, helped students learn theory and implementations of different data structures as well as object oriented programming and C++
- For Principles of Software, helped students learn software design, reasoning about code, and concepts like polymorphism.
- Designed and graded exams and homeworks, as well as run office hours and labs.

## Projects

### Submittity

Open Source Online Grading Platform

- Designed online office hours queue system now used by many of the computer science classes on campus
- Designed online polling system to aid in transition to hybrid classes for the fall of 2020

### Overdue

Top-down 3D Adventure Game

- Helped design and program Overdue, where you play as a librarian by day, assassin by night, hunting down the souls of people who took books from your library.
- Designed and programmed player movement and abilities, implemented character animations into the game, and designed and programmed the game levels. Collaborated with 4 other students in Unreal Engine 4

### R.I.N.G. (Radially Integrated Nexus Guardian):

24 Hour Game Jam Project

- Programmed a 2D tower defence style game centered around rotating orbital rings to destroy incoming meteors
- Collaborated with 2 other students in Unity

## Leadership

## **RPI Chapter of Upsilon Pi Epsilon, Computer Science Honors Society**

Vice President

*Troy, NY*

*May, 2019 - Present*

- Oversaw individual committees as well as maintaining the day to day operations of the organization.