# MIRANDA COVER

# **SOFTWARE ENGINEER**

## **EDUCATION**

#### Massachusetts Institute of Technology (MIT)

Bachelor's of Science Computer Science and Applied Mathematics (18C) 2016 Minor in Ancient and Medieval Studies.

## **EMPLOYMENT**

#### **Funkitron**, *Programmer and Game Designer*, Cambridge, MA

Jun 2016 - Current

Programming for the mobile phone game Cascade for iOS and Android. Implementing new game mechanics and features in C++. Building tools for developers in Lua and C++. Tools include modular code for designers to implement UI elements for speed and bug reduction. Automated various processes to reduce resource use. Creating and balancing new levels. Building testing suites for QA across multiple levels. Lead designer for level groups called lands.

#### **MIT Game Lab**, *Research Assistant*, Cambridge, MA

Jun 2015 - May 2016

Designed, programmed, and managed a team of students to develop a Real Estate Game for use in educational settings regarding risk and ethics in the real estate market. Prototyped and carried out user studies for the game. Created original graphics and UI implementations for the game. Programmed game mechanics. Debugged and helped to manage version control and QA across the team. Helped set up and participated in the MIT-Shenkar Meaningful Games Workshop.

#### **SKILLS**

SOFTWARE: Python, Java, C++, C#, Unity, Lua, Git, Perforce

WEB DEVELOPMENT: PHP, JavaScript, CSS, HTML

MATHEMATICS AND DATA SCIENCE: R, Data Analysis, Statistics, Probability, Algorithms, LaTeX

# **PROJECTS**

#### Lygo

Lygo is a minimalist exploration game. The game focuses on the reasons we leave home, what it feels like to leave, and what it feels like when we return. Programmed mechanics and UI elements. Prototyped and implemented various components of the game. Concept and level design, along with original graphics. Helped manage a team of students and carried version control and QA across the team.

Featured at Tel-Aviv Innovation Festival 2015

#### Resonance

Resonance was initially a product of the 2017 Global Game Jam at the MIT location. Game focuses on sound waves and music and features sources and multiple types of emitters that the user can add to a board and experiment with the sounds. Responsible for project management, programming, debugging, documentation, prefab generation, and UI implementation.

#### Snake Time Continuum

Class project in a team of 5. Responsible for graphics, UI design and implementation, QA, and debugging. Integrated back-end code with Unity. This game was made in Unity 5 with C# and is playable in browser and on Android.