

## education

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**B.A. in Computer Science** – Boston University

**September 2014 – December 2017**

- Major GPA: **3.91** / Overall GPA: **3.67**
- Dean's List: **Fall 2014, Spring 2016, Fall 2016**

## experience

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**Course Assistant** – Boston University

**January 2015 – December 2017**

- Taught six semesters in three intro CS classes, covering Python, Java, MySQL, and HTML
- Developed Python scripts to automate grading of JFLAP finite state machines

## projects

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**Pylet** – [C++](#), [Qt](#), [Qt Designer](#)

[www.chamathsd.me/pylet](http://www.chamathsd.me/pylet)

- Python IDE for beginner programmers with a simplified interface and clear error reporting
- Used by BU students during the Summer 2016 semester for class assignments

**Distance Field Raymarcher** – [GLSL](#)

[www.chamathsd.me/df](http://www.chamathsd.me/df)

- Path tracing tool that can render photorealistic depictions of simple scenes in near real-time
- Combines the OpenGL pixel shader pipeline with traditional ray tracing techniques

**HotSwap** – [Android Studio](#), [Firebase](#), [Java](#), [Python](#), [Flask](#), [Scrum](#)

[www.chamathsd.me/hotswap](http://www.chamathsd.me/hotswap)

- Android app that allows users to swap unused items and chat in real-time
- Integrated Facebook and Twitter authentication as well as the Stripe payment API
- Coordinated team efforts as a Scrum master during several development cycles

**mycritic** – [Python](#), [Django](#), [HTML5](#), [CSS](#), [SQLite](#)

[www.chamathsd.me/mycritic](http://www.chamathsd.me/mycritic)

- Crowdsourced review aggregator which recommends media based on user similarity
- Used a Python and SQLite backend to index new user ratings in sub-linear time

**WesterosCraftUnreal** – [C++](#), [C](#)

[www.chamathsd.me/wcu](http://www.chamathsd.me/wcu)

- An Unreal Engine 4 plugin which dynamically streams Minecraft world data

## awards

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**Best Beginner Hack** - *Codestellation 2015*

**November 2015**

- For ThoughtSpace, a virtual playground that utilizes Unreal Engine 4, Oculus Rift, and Leap Motion
- Awarded out of 16 teams and among 40 other contestants

**Best Web Application** - *Codestellation 2016*

**November 2016**

- For ImitationGame, a Node.js app which uses multiplayer chatrooms to gamify the Turing test
- Awarded out of 15 teams and 30 other contestants

## skills

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**Languages (Proficient):** C++, Python, Java, SQL

**Languages (Familiar):** C, C#, GLSL, JavaScript, R, HTML, CSS

**Operating Systems:** Ubuntu / Debian Linux, Android, Windows

**Frameworks:** Qt, PyQt, Travis CI, Android Studio, Unreal Engine 4, CMake, Firebase, Node.js