

Rebecca Turner

becca.000 — Reston, VA || Waltham, MA — 637275@gmail.com — (571) 643-5466

I am a computer science BS enrolled at Brandeis University passionate about software engineering and art, including graphic design and motion graphics. I'm looking for an internship in software development where I can contribute meaningfully and learn real-world development practices.

EDUCATION

The New School of Northern Virginia (June 2017, Honors Diploma in computer science awarded) GPA: 3.89 / 4.00

Brandeis (August 2017–May 2021), computer science major GPA: 3.835 / 4.00

Courses include calculus, linear algebra, physics (mechanics / electricity and magnetism), advanced programming techniques, and data structures and the fundamentals of computing with operating systems planned for Fall 2018.

SOFTWARE

I am a Unicode domain expert and have extensive experience with Java, Python, C, Javascript, PowerShell, L^AT_EX, PHP, HTML 5, CSS 3, and the Microsoft Office suite, and moderate experience with Bash, shell scripting, Ruby, Rust, Go, Wolfram Mathematica, C#, F#, and the .NET API.

I have developed a number of independent software projects.

I C the Light, a distance-estimating ray marcher designed to render images of quaternion Julia sets. Written in C.

Github: [9999years/i-c-the-light](https://github.com/9999years/i-c-the-light)

Paper: becca.000/i-c-the-light.pdf

juliaplotter, a script to render cells or grids of arbitrary Julia sets, to overcome difficulties other renderers have in visualizing the many possible values of the constant c in the Julia set for a given rational function. Written in plain Python.

Github: [9999years/juliaplotter](https://github.com/9999years/juliaplotter)

The Daily Report, a highly-customizable framework for generating daily agendas for use with receipt printers. Capable of reading and processing Google calendars, outputting weather forecasts, countdowns, to-dos, daily news, and other useful information. Currently running on a Raspberry Pi interfacing with a Star thermal receipt printer. Python.

Github: [9999years/daily-report](https://github.com/9999years/daily-report)

PSVarDump, a PowerShell module for debugging PowerShell scripts by inspecting variable contents. PowerShell script.

Github: [9999years/PSVarDump](https://github.com/9999years/PSVarDump)

becca.000/fox, A program to simulate and visualize the interactions of plant and animal populations in a virtual ecosystem. HTML 5 canvas, Javascript.

glitcher.becca.000, an in-browser databending app which procedurally glitches images by modifying their binary data. PHP, Javascript.

becca.000/integral, an interactive web app to visualize integral approximations. HTML 5 canvas, Javascript.

#wrap, an extension for Google Chrome to wrap Tumblr's hashtag interface to one line, addressing a widely-held annoyance with Tumblr's user interface. Three years after its publication, *#wrap* had retained 30,315 active users. CSS.

becca.000/mandelbrot, an interactive web app to explore the Mandelbrot set and visualize incremental values of the underlying sequence at arbitrary points. HTML 5 canvas, Javascript.

Twitter bots such as *@gardensbot*, which posts grids of plant and animal emoji in virtual "gardens" every other hour, and *@goodwordsbot*, which generates fake but plausible English words from Latin and Greek roots. PHP.

DESIGN / MOTION GRAPHICS

I have experience with Adobe CC suite software (namely Photoshop, Illustrator, and AfterEffects), and Cinema 4D across a variety of fields — I have created vector illustrations, manipulated photos and videos, and created motion graphics from scratch.

A WIRED article (*11 Beautiful, Psychedelic GIFs Created by a Math Whiz*) linked to a directory of GIF artists I curate (gifartists.9999years.com).

Motion graphics reel available at becca.000/reel