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# Joshua Storm Becker

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## Education

**Princeton, NJ** **Princeton University** **Fall 2015 – May 2019 (Expected)**

Bachelor of Science in Engineering - Computer Science

- Current GPA: 3.52 of 4.0

Relevant Undergraduate Coursework

- Past: General Computer Science; Data Structures & Algorithms; Computer & Electronic Music through Programming; Multivariable Calculus; Electricity & Magnetism
- Current: Introduction to Programming Systems; Introduction to Logic Design; Linear Algebra
- Upcoming Spring (Tentative): Advanced Programming Techniques; Reasoning About Computation

## Employment

**Software Developer, Intern** **Analytical Graphics Inc.** **Summer 2016**

glTF Pipeline | JavaScript, Node.js | https://www.npmjs.com/package/gltf-pipeline

- Created command-line interface for client-end use of glTF-Pipeline stages.
- Implemented 3D-model cache optimization stage, increasing frame rates by up to 100% in vertex-bound cases.
- Implemented pipeline stage to generate normals for input models which lacked proper vertex normals.
- Refactored asynchronous (callbacks) code to use promises.

Cesium.js & Cesium Cloud | JavaScript | https://cesiumjs.org/ | https://cesiumjs.com/

- Resolved bugs in the Cesium.js 3D globes library and Cesium Cloud front-end in support of the Cesium Cloud beta launch.

**Grader & Tutor** **Princeton University** **Winter 2015 – Present**

General Computer Science | Java | http://www.cs.princeton.edu/courses/archive/fall16/cos126/

- Tutored and graded for Princeton University's introductory computer science course (COS 126).

**Gifted & Talented Intern** **National Security Agency** **Summer 2015**

- Implemented various cryptographic methods in Cryptol (Haskell-based domain specific language).
- Produced LaTeX literate specifications of Cryptol implementations.

## Projects

**WebSynth** **http://becker.codes/WebSynth** **Summer 2016**

- A dynamic subtractive synthesizer built into a single webpage.
- Stack: JavaScript, p5.js

**Zenith** **http://www.reachzenith.com/** **Winter 2015**

- A health app for improving ones mental focus and emotional wellbeing.
- Developed with a team at Princeton University following a successful hackathon.
- Stack: Swift, Xcode, Firebase, Mixpanel

## Selected Additional Experience and Awards

- MIT Online Science, Technology, & Engineering Community Alumni
- Northrop Grumman Engineering Scholar
- Princeton University Laptop Orchestra Performer (PLOrk)

## Languages and Technologies

- Most experienced with JavaScript and Java.
- Some experience with C, Python, Haskell, and Swift.
- Comfortable in Windows, Mac OS, and most Linux distributions.