

Miles Hilton 202.384.0963 • mph2137@columbia.edu • [batmiles.github.io](https://github.com/batmiles) • [linkedin.com/in/mileshilton](https://www.linkedin.com/in/mileshilton)

Education

Columbia College, BA, Computer Science

Expected May 2017

Coursework: Computer Graphics, Computer Animation, Graphics and Computational Motion, Computer Vision

Skills & Interests

HTML/CSS, JavaScript, JQuery, Angular • Python, PHP, Tornado, Tanium • Java, C++, C

Vision and graphics, accessible web design, Unity, digital security, biking

Projects

Pipeline and Raytracing Renderers, Spring 2016

- Developed Blinn-Phong shading, Bezier surfaces, and shadows for a C++ raytracing renderer
- Coded pixel- and vertex-shaders for a C++ pipeline renderer
- Minimized collision calculation time by conducting binary search on nested bounding boxes

Physics Engine, Fall 2015

- Created a C++ physics engine with explicit- and symplectic-euler integration, general and intra-particle gravity, spring forces, and collision detection and response, and rendered results using OpenGL

Experience

Middle Eastern, South African, and Asian Studies Department

September 2016 – Present

New York City, NY • Webmaster

- Refactor the faculty directory into an Angular application to support multiple views and facilitate search
- Maintain the site using HTML/CSS, Javascript, JQuery, and Angular

Goldman Sachs

June 2016 – August 2016

Jersey City, NJ • Summer Analyst – Cloud Platforms

- Reduced the time for generating new configuration sets from hours to seconds by developing an Angular application to automate the process
- Created a dashboard to monitor 40,000 nodes in the cloud and take corrective action via the Tanium API
- Integrated Tanium and the Angular application with a Python backend running on a Tornado server

Student Association for the Advancement of Women

June 2015 – June 2016

New York City, NY • Webmaster

- Developed a 5-page website for the organization using Angular, Javascript, and integrated google forms and calendars
- Collaborated with the organization's founders in the design process, iteratively prototyping the site to reach a clean and appealing design

Spoken Language Processing Group

December 2013 – June 2014

New York City, NY • Research Assistant

Conducted user tests on the Java BOLT Arabic-English machine translator's oral interface

- Gathered data leading to the publication of a paper at the SigDial conference

Leadership & Awards

Columbia Queer Alliance President

May 2015-Present

OUTstanding Leadership Award

May 2015

Columbia John Jay Scholar, Presidential Scholar Semifinalist

December 2013