

# Adrian Biagioli

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Website: [flafla2.github.io](http://flafla2.github.io)

Github: [github.com/Flafla2](https://github.com/Flafla2)

## Education

**2016 - Present** **Carnegie Mellon University** - Pittsburgh, Pennsylvania

*School of Computer Science*

**2012 - 2016** **Bergen County Academies (BCA)** - Hackensack, New Jersey

*Academy for Engineering Design Technology*

**Notable courses:** Data Structures, Linear Algebra and Differential Equations, AP Computer Science, AP Calculus AB, Advanced Electrical Engineering, Introduction to Engineering Design I / II, Oculus Rift Development, Manufacturing Process CIM

## Experience

**Summer 2016** **The Gifted Child Society** - Instructor

- Taught 3 classes over 2 sessions (6 weeks total) as part of The Gifted Child Society's Summer Super Stars Camp STEAM: Imaginative 3-D Printing (Autodesk Inventor, 3 Groups Grades 7-8), Imaginative 3-D Modeling (Autodesk 123D Design, 4 Groups Grades 4-6), Virtual Reality (Unity, 2 Groups Grades 7-8)

**ACM SIGGRAPH** - Student Volunteer

- Student volunteer and attendee at ACM SIGGRAPH 2016 in Anaheim, CA

**Summer 2015** **BCA Video and Animation Lab** - Intern

- Project Lead, Programmer. Worked with interns on virtual reality project for Ellis Island National Park Service

- Collaborated with other programmers and artists

**Summer 2014** **Quintech, Inc.** (Also known as *Rova*) - Intern

- Tested and contributed feedback for beta device management software

## Skills

- Proficient in the Unity game engine
  - Unity Certified Developer: Certificate No. **2016031-5C437**
  - Experienced in Virtual Reality Development (Oculus Rift, SteamVR, Google VR platforms)
- Proficient in Java, C++, C#, Shader languages (Cg, GLSL)
  - Familiar with web languages: Javascript (and jQuery), HTML (and HTML5), CSS
- Experienced with OpenGL graphics pipeline, LWJGL
- Experienced in Blender (3D modeling software) and Quixel (3D texturing suite)
- Experienced in the Git versioning system
- Experienced in Autodesk Inventor and AutoCAD (also can sketch designs freehand)
- Experienced in Arduino (embedded) programming

## Projects

Visit my Github for more information: [github.com/Flafla2](https://github.com/Flafla2) or my Linkedin: [linkedin.com/in/adrianbiagioli](https://linkedin.com/in/adrianbiagioli)

- **Ellis Island Project:** Virtual representation of Ellis Island as it was in 1924 to be viewed in the Oculus Rift and HTC Vive. Collaboration between BCA and Ellis Island National Park Service.
- **BCA Knighthawk:** Effort to create a 3-axis motion platform to be used as a VR flight simulator. Inspired by Birdly by Max Rheiner. Senior Engineering capstone project.
- **Personal Blog:** Discussion of topics such as procedural generation, interactive design, and others: <http://flafla2.github.io>
- **HTC Vive Teleportation System:** Project Lead / Maintainer. An open source, production-ready teleportation system for the HTC Vive and Unity. Allows players to traverse VR environments bigger than their physical room. Automatically detects and displays virtual world boundaries.
- **Wiimote API for Unity:** Project lead. Free and open source framework for Wii Remote motion controls in the Unity game engine. Supports most popular extension controllers. Uses bluetooth to connect.
- **Remote2D:** Fully-featured 2D game engine written in Java with LWJGL
- **Hacker Heist:** Second place at HackBCA 3. Asynchronous VR game where one player is a burglar (in VR) and two players are security guards (outside of VR, playing on a monitor).