



## Game Development Experience

### [The Ajay McCaleb/John Nielsen Experience](#)

August 2011-Present

Lead Programmer/Designer

- Implemented using **Twine**, **Inform 7**, **Processing**, and **Game Maker** with **HTML** links
- An **experiment in merging** hypertext, IF, computational narrative, and ARG gameplay
- Explores the process of maturity through two intertwined storylines covering radically different lives

### [Rocket Warrior](#)

January 2011-Present

Supporting Programmer/Administrative Manager

- Implemented in **C# with XNA 4.0**, ADTs including scene graphs, and software **design patterns**
- Part of a quarter-long project developed with a four person team and a group of mentors/advisors
- A combination of *Super Smash Brothers* and *King of the Hill* with emphasis on gunplay and chaos
- **Semi-finalist** for Experience Award in 2011 Sammy Awards at UCSC

## Work Experience

### **NVIDIA Corporation**

June 2012-September 2012

#### **Systems Software Intern**

- Worked with the **Video Experience Group** resolving issues with video playback on Windows
- Gained exposure to the **Windows Display Driver models** and the **video processing pipeline**
- **GPU internals** including: P-state tuning, scanline registers, shader initialization, 3D video playback
- Heavy application of problem solving skills to **debug issues** by efficient and modular means

Computational Cinematics Studio

December 2011-Present

#### **Undergraduate Researcher**

- Porting the photography game [Panorama](#) to the Xbox 360 for a future release date
- **Educating novice game designers**/developers into the caveats of console development
- Implementing a **game engine on the PlayStation 3** for game engine architecture education

### **Chronic Logic LLC**

September 2010-February 2012

Software Engineering Intern

- Developed **GUI and profiling systems** for *Climb!*, an upcoming Xbox 360 game
- Oversaw further GUI standardizations and developed **software standardization systems**
- Incorporated new gameplay systems into [Zatikon](#), a free-to-play PC title of high prestige
- **Xbox 360 development** experience with *Climb!* and **ActionScript** experience with [Zatikon](#)

University of California – Santa Cruz

September 2010-Present

#### **Computer Science/Engineering Tutor/Mentor**

- Educated CS students in: **Java**, **C/C++**, **C#**, **Processing**, and **computer graphics** in **OpenGL**
- Educated CE students in **logic design**, **computer architecture**, and **assembly language**
- Worked closely with CS students on academic probation to improve their academic stature
- Tutoring experience in many contexts including: one on one, group sessions, and **guest lectures**

## Education

University of California- Santa Cruz

Expected Graduation June 2015

- Majors: Computer Science: Computer Game Design B.S. **and** Computer Engineering M.S.
- Minors: Applied Mathematics **and** Electrical Engineering
- 3.81 GPA as of 5/12
- Top 15% of students for 2009-2011 academic years

Cabrillo College - Completed calculus series prior to university studies

San Lorenzo Valley High School - Computer Graphics: Winner of Outstanding Career Portfolio Award

Miscellaneous - Working knowledge of **game console architecture and basics of GPU architecture**

Further details can be found at: <http://people.ucsc.edu/~amccaleb/default.html>