

Zachary T. Zimmerman

oneman2feet.github.io • zacharytzimmerman@gmail.com • (917) 698-9773

Education

Cornell University College of Engineering August 2013 - May 2017
B.S. in Computer Science, Minors in Music and Game Design GPA 4.0 / 4.3

Stuyvesant High School September 2009 - June 2013
Advanced Regents Diploma, Class of 2013 GPA 4.0

Work Experience

Google Inc. Software Engineer May 2015 - August 2015

- Implemented a new feature for a data visualization dashboard in the AdWords front-end
- Interfaced with charting library and interpreted server responses to route relevant information

Bloomberg L.P. Software Developer June 2014 - December 2014

- Developed three cutting-edge data visualization widgets for use in the Bloomberg Terminal
- Used HTML5 Canvas, Javascript, and RequireJS for the fastest possible visuals
- Implemented hit-testing, event-driven interactions, and data-model-world transforms

V.I.A. Vintage Intelligence Agency Web Developer June 2012 - September 2014

- Developed highly customized and artistic websites for the fashion company (viavtg.com)
- Optimized pre-loading of resources, implemented infinite scrolling, and animated with jQuery

Projects

Impulse: Action Platformer Game gdiac.cis.cornell.edu/gallery January 2015 - May 2015

- Rapidly prototyped initial game and level editor in Javascript with SVG and Box2dWeb
- Designed and implemented lazy camera with support for tracking an arbitrary number of targets
- Worked heavily on game graphics, including custom shaders and particle simulator effects

A Sharp: Music Visualizer github.com/oneman2feet/a-sharp October 2014 - December 2014

- Designed a music visualizer to accurately represent music, rather than just accompany it
- Performed sound analysis with librosa to detect mel frequency spectrum and track beats
- Extracted the foreground to determine the pitch of the melody and estimate the overall mood
- Visualized the music using pyglet for displacement mapping and physically-based animation

Sleepy Bob: Google Game Jam oneman2feet.github.io/sleepybob September 14, 2013

- Lead the 1st place team in this 24-hour hackathon, coded a sidescrolling sleep-themed game
- Implemented parallax effects in Javascript and utilized Box2D.js for ragdoll simulation

Coursework

Advanced Game Design, Embedded Systems, Human-Computer Interaction	2015-2016
Intro Game Design, Analysis of Algorithms, Computer Graphics, Digital Logic	2014-2015
Functional Programming, Discrete Mathematics, Object-Oriented Programming	2013-2014

Activities

The Cornell Glee Club gleeclub.com January 2015 - present

- Proud member of the world-renowned choral ensemble
- Sang at Carnegie Hall in April 2015 and will tour Mesoamerica in January 2016

Chai Notes A Cappella thechainotes.com January 2014 - present

- Assistant Musical Director (2015-2016): Arranged songs and occasionally lead rehearsal
- Graphic Designer (2014-2015): Designed all posters, flyers, programs, tickets, and chalk art

SKILLS

Programming Langs

Javascript • Python • Java
Dart • OCaml • Scheme

Web Development

HTML5 • CSS3 • SASS • SVG
Canvas • Angular • NodeJS
Gulp • RequireJS • jQuery
Flask • MongoDB

Software Tools

Vim • Emacs • Git • SVN
Perforce • Inkscape • L^AT_EX

GITHUB

github.com/
oneman2feet

Pokemon Showdown Bot
Personal Website • PokeStats
Dotfiles • Résumé Template
Computer Generated Art

INTERESTS

Design

Typography • UI & Interaction
Design • Lettering • Brand &
Logo Design • Graphic Design

Music

A Cappella • Barbershop
Arranging • Overtone Singing

Tech

Data Visualization • OpenGL
Computer Graphics • Game
Design • Web Development
Algorithms • Functional Pro-
gramming

Fun

Bodyboarding • Video Games
Board Games • Rubik's Cubes