# WILLIAM GUSS

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#### **EDUCATION**

## University of California, Berkeley

August 2015-2019

Expected B.S. in Electrical Engineering & Computer Science

Expected B.A. in Applied Mathematics

Regents' and Chancellor's Scholar (Highest honor awarded to incoming undergraduates)

Current Coursework: Data Structures (CS 61B), Honors Real Analysis (MATH H104), Linear Algebra & Differential Equations (MATH 54).

University of Utah

August 2013 - May 2015

Nonmatriculate in Mathematics & Computer Science CS2420: Algorithms and Data Structures (A-)

Overall GPA: 3.933 (18 units)

#### **EXPERIENCE**

LeapYear

October 2015 - Present

Berkeley, California

Machine Learning Intern

- · Theorizing and implementing  $\epsilon$ -differentially private deep neural network algorithm in Python.
- · Working with team on web-api using Django RESTful.

Databa.it Research

October 2013 - Present

Salt Lake City, Utah

Lead Developer/Machine Learning Researcher

- · Theorized and implemented new ML algorithm, Functional Neural Networks. Presented work at the Intel International Science Fair. Submitting paper to NIPS.
- · Developed DeepLearn.NET, an open source C# deep learning framework.
- · Created novel gradient descent method for feed forward ANNs and applied the algorithm to breast cancer diagnostics (mammography and FNA) with 99.8% error rate. Presented at the University of Utah Global Health Conference. Won United States Congressional App Challenge.

# West Connect (wconnect.org)

August 2014- December 2015

Full Stack Web Developer

Salt Lake City, Utah

- · Developed backend (Node.js) integration with Facebook OAuth/Google Maps API.
- · Designed UI with conjunction with Ember.js/Bootstrap/Handlebars/JQuery

#### University of Utah Musculoskeletal Research Lab

Summer 2014

Intern/Developer

Salt Lake City, Utah

· Parallelized C++ finite element solver using OpenMP and Blelloch Scans.

## Lost Code Studios

August 2012 - June 2014

Lead Developer

Salt Lake City, Utah

- · Published "Space Hordes" to Xbox Live Indie Marketplace
- · Created component oriented entity framework for game development in C# and Java.
- · First prize in IGDA Salt Lake City Global Game Jam (2013,2014).

### TECHNICAL SKILLS

Computer Languages

C#, Java, C++, Python, JavaScript, LaTex, PHP,

Protocols & APIs

XNA, LINQ, Ember.JS, JSON, Windows Phone Development, Node.JS

Tools

Git, Visual Studio, Eclipse, Sublime, IDLE, SVN, Heroku

Github Score

473