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 Pure Mathematics
Regents' and Chancellor's Scholar (*Highest honor awarded to incoming undergraduates*)
Coursework: Data Structures, Honors Real Analysis, Linear Algebra & Differential Equations, Topological Measure Theory, Machine Learning.
Overall GPA: 3.7

University of Utah *August 2013 - May 2015*
Nonmatriculate in Mathematics & Computer Science
CS2420: Algorithms and Data Structures
Overall GPA: 3.9 (18 units)

EXPERIENCE

Machine Learning at Berkeley December 2015 - Present
Founder/Director of Research *Berkeley, California*

- Theorized and implemented new ML algorithm, `Functional Neural Networks`. Presented work at the Intel International Science Fair. Published to ICML 2016.
- Project Manager on `OpenBrain`, a massively asynchronous recurrent neurocomputational approach to AGI.
- Researching `Deep Active Learning`, a bridge between deep learning and active learning using policy/selection steps inspired by Alpha Go.

Personal Projects

- Developed `DeepLearn.NET`, an open source C# neural network 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.
- Implemented `git` from scratch in java with support for remotes, diffs, and most connonical features.

LeapYear October 2015 - December 2015
Machine Learning Intern *Berkeley, California*

- Theorized and implemented ϵ-differentially private deep neural network algorithm in Python.
- Working with team on web-api using Django RESTful.

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, `GameLib/GameLibJ` 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