

William Chuang

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EDUCATION ♦ **University of San Francisco**, Spring 2015-Present. Major GPA: 4.00/4.00.

- Senior student of Mathematics, and Computer Science.
- Have taken at or transferred to USF: CS 673 Graduate Algorithms, Math 422 Combinatorics, Real Analysis, Linear Algebra, Intro to Formal Methods, Linear Algebra and Probability, Discrete Mathematics, Automata Theory, Game Engineering, Computer Architecture, C and System Programming, Data Structure, and Algorithms, Calculus I, II, and III, Applied Mathematics I, II, and III, Computational Physics, Thermal Physics, Mathematical Physics I, Differential Geometry, Supersymmetry, and Quantum Field Theory II, etc.
- By the end of Aug 2016, have finished 10 projects within the courses.
- ♦ **National Taiwan University**. Focused on Theoretical Physics, and Mathematical Physics. Fall 2011-Spring 2013.
 - Analyzed the Ising model (an instance of Restricted Boltzmann Machine from the field of deep learning) using Steepest Descent-Contour Integral's Asymptotic Solution.

SKILLS ♦ Languages: R, C/C++, Lua, Python, Java, and Scheme.

♦ Libraries/Software: D3.js, CUDA, Numpy, TensorFlow, and Torch.

♦ Database/Toolkit: Spark, Spark SQL, Spark ML, MongoDB.

WORK ♦ **Volunteer Research Assistant, and Student Research Programmer**, University of San
EXPERIENCE Francisco. (June 2016-Present)

With Prof. David Galles, developing algorithms, theorems, and practical tools for Deep Learning by using C++, Python, OGRE 3D, Automata Theory, and Combinatorics.

♦ **Research Assistant**, University of San Francisco, Office of the President, Lone Mountain Campus Rossi Wing, 4th Floor. (Sept 2016-Present)

Working with Prof. Jeff Hamrick, and transcribing his "MSAN504 Review of Probability and Statistics" lecture notes into a book.

♦ **Guru**, Google CS-First Program, San Francisco Bay Area. (Aug 2016-Present)

Facilitating discussions and answering student questions using guided materials.

Providing encouragement to students, and furnishing students with a basic understanding of native computer languages.

♦ **Volunteer**, Association for Computing Machinery (ACM), San Francisco. (July 2016)

ACM Special Interest Group on Management of Data SIGMOD 2016.

- Leading and facilitating the research presentation within conference rooms, and keeping each presentation on schedule.

♦ **Teaching Assistant**, National Dong Hwa University, Dep of Physics. (Fall 2008-Spring 2010)

Assisted students for all lower division courses of physics major.

♦ **Research Assistant**, National Dong Hwa University, Dep of Physics. (Spring 2010)

Apply linear algebra to find approximate solutions for PDE problems for n-body problems.

ADDITIONAL ♦ Awarded 2004 First prize and 2003 Second prize in National Science and Engineering Fair in
INFORMA- Taiwan.
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