

# ANGELICA CHEN

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## EDUCATION

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### Princeton University - Princeton, NJ

*Graduation: May 2017*

*Degree Expected:* Bachelor of Arts in Mathematics

*Certificate Expected:* Global Health and Health Policy

*Affiliations:* The American Whig Cliosophic Society (Director of Website & Technology), Innovation Magazine (Writer, Web Designer), The Daily Princetonian (Operations Consultant), Taiwanese American Student Association (Executive Board Member)

### Stanford University Online High School - Palo Alto, NJ

*Graduated May 2013*

*Relevant Coursework:* Logic, Linear Algebra, Differential Equations

### High Technology High School - Lincroft, NJ

*Graduated June 2013*

*Relevant Coursework:* Multivariable Calculus, Introduction to Engineering, Object Oriented Programming, Structured Programming in C++, Game Programming I, Game Programming II

## EXPERIENCE

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### l'Institut de Recherche pour le Développement (IRD), Research Intern, June 2014 - Present

- Compiled a global bacterial meningitis incidence database
- Conducted a comparative study of bacterial meningitis seasonality

### Courant Institute of Mathematical Sciences, Artificial Intelligence Research Intern, Jun. - Aug. 2013

- Formulated logical axioms describing human common sense and proved them using SPASS
- Published research for the 2nd Annual Conference on Advances in Cognitive Systems

### Alcatel-Lucent Bell Labs, Research Intern, Jan. - Jun. 2013

- Conducted mathematical analysis of wireless data traffic using Mathematica
- Analyzed emptying time for paused slotted ALOHA systems

### Heffner Biomedical Imaging Laboratory, Research Intern, May - Nov. 2012

- Developed a software for predicting patients risk of developing severe complications after undergoing transcatheter aortic-valve replacement (TAVR) using Python and MATLAB
- Published and presented algorithm for recognizing the aortic annulus at the 2012 IEEE Healthcare Innovation Conference

### Mailman School of Public Health (Columbia University), Research Intern, Jun. 2011 - Mar. 2012

- Analyzed mortality/morbidity data of pandemic influenza using R
- Derived a mathematical model relating bacterial coinfections to influenza mortality in middle-aged patients
- Provided the CDC with recommendations for a modified vaccine program

## RELEVANT SKILLS

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**Programming:** Java, C++, Python; **Web Development:** HTML, CSS, PHP, Javascript, MySQL; **Data Analysis:** R, MATLAB, Mathematica

## PUBLICATIONS

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**Reasoning from Radically Incomplete Information: The Case of Containers** - *Advances in Cognitive Systems*. Davis, E., Marcus, G., Chen, A.; December, 2013

**Development of an Automatic Algorithm for 3-Dimensional Aortic Annular Measurements for Prediction of Transcatheter Aortic Valve Replacement Outcome** - *Proceedings of the 2012 IEEE Healthcare Innovation Conference*. Angelica Chen, *et al.*; November 8, 2012

## AWARDS

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**Semifinalist**, 2013 Intel Science Talent Search

**Finalist**, 2013 National Junior Science and Humanities Symposium

**1st Place** in Medicine & Health Sciences, 2011 New York City Science and Engineering Fair

**Semifinalist** (New York), 2010 SIEMENS Competition in Math, Science and Technology

**Qualifier (Top 5% in the US)**, American Invitational Mathematics Exam

**Outstanding Paper (Top 8 out of 518)**, 2012 COMAP High School Mathematical Contest in Modeling (HiMCM)

**First place individual**, Mid-Atlantic Region, 2011 - '12 AMATYC Student Math League