

Akilesh Tangella

Education

- 2014-Present **University of Pennsylvania, Philadelphia, PA,**
Jerome Fisher Program in Management and Technology
Candidate for Bachelor of Applied Science (Computer Science), Bachelor of Science in Economics (Wharton) (Concentration in Finance), Minor in Mathematics.
Relevant Coursework: Programming Languages and Techniques I and II, Mathematical Foundations of Computer Science, Introduction to Algorithms, Statistical Interference, Randomized Algorithms, Real Analysis, Abstract Algebra, Computational Learning Theory (current), Database and Information Systems (current), Algorithmic Game Theory (current)
- 2011-2014 **Ward Melville High School, East Setauket, NY,**
Graduated With Honors.
- 2012-2013 **Stony Brook University, Stony Brook, NY,**
Young Scholars Program (Took classes while in high school) .
Relevant Coursework: Multivariable Calculus with Linear Algebra, Differential Equations with Linear Algebra, Analysis of Algorithms

Research Experience

- Starting February 2017 **Research at Penn, Department of Computer Science, University of Pennsylvania,** Mentor: Dr. Sanjeev Khanna.
 - o Project in theoretical computer science.
- Summer 2013 **High School Research, Department of Applied Mathematics and Statistics, Stony Brook University,** Mentor: Dr. Yuefan Deng.
 - o Mathematically modeled platelet geometry for potential applications in Computational Flow Dynamic (CFD) simulations of platelet activation and aggregation.
- Summer 2012 **High School Research, Department of Physics, Stony Brook University,** Mentor: Dr. Ismail Zahed.
 - o Theoretically studied cold atoms and superfluids.

Teaching Experience

- January 2017 - Present **CIS320: Introduction to Algorithms, University of Pennsylvania,** Teaching Assistant.
- August 2015 - December 2016 **STAT430: Probability, The Wharton School,** Teaching Assistant.

Summer Internship Experience

- August 2016 **Wall Street Investment Management LLC, (wallstim.com).**
 - o Collect and update market data for visualizations in client presentations.
 - o Learn about various investing strategies, including monthly re-balancing, using put indexes, and properties of exchange rates.

- June-July 2016 **Sri Sathya Sai Institute of Higher Medical Sciences, Prashantigram (Puttaparthi, India).**
- o Gave ideas for potential operational improvements to doctors
 - o Interacted with patients in Telugu and assisted doctors in free hospital in rural India.
 - o Delivered a presentation on stroke to nurses.
- Summer 2015 **Heritage Academy (Essiam, Ghana), Global Ed Intern.**
- o Awarded 4000 dollars from Penn's International Internship Program (IIP).
 - o Taught math to 10th, 11th, and 12th graders, and computer technologies to 10th and 11th graders.
 - o Helped to digitize the school's academic and business records.
- Summer 2014 **School Yourself, Educational Technology, Summer Intern.**
- o Used YAML and Python to make review problems for topics including: congruence, similarity, polynomials, pythagorean theorem, etc.
 - o Improved lesson curricula for courses in algebra and geometry that will be subsidized and featured on edX.
 - o Discussed ideas for calculating student mastery of a subject.

Honors and Awards

- 2017 Eta Kappa Nu, Lambda Chapter (to be inducted)
- 2014-2015, 2015-2016 University of Pennsylvania Dean's List
- 2014 New York/New Jersey Regional Botball Robotics Competition
1st Place (Overall, Seeding Round), 2nd Place (Double Elimination Round), Best Documentation Award
- 2011-2014 4x Qualifier for the American Invitational Mathematics Examination (AIME)
- 2014 Science Bowl
1st Place at Long Island High School Regional Science Bowl Competition, Competed in National Science Bowl Competition in Washington D.C.
- 2011-2014 Columbia University Science Honors Program
Courses: Organic Chemistry, Experiments in Modern Physics, Nanotechnology, Quantum Mechanics and Relativity, Java Programming, Astronomy and Astrophysics
- 2011-2014 Suffolk County High School Math Tournament
4th Place (2013), 2nd Place (2012), 5th Place (2011) Individually, 1st Place Team (2011-2014)
- 2013 National Advanced Placement (AP) Scholar
- 2012-2013 Suffolk County High School Math League Competition
1st Place (2013), 2nd Place (2012)
- 2011-2013 Three-time Gold Medalist at Long Island Math Fair
Studied Markov Chains, Catalan Numbers, and Fourier Series
- 2011-2012 Math Kangaroo Competition
National Award Winner
- 2011 United States of America Mathematical Talent Search (USAMTS)
Bronze Medalist

Programming/Software Experience

Java (intermediate-to-advanced), OCaml (basic), KISS-C (Robot Programming) (basic), \LaTeX (medium), Mathematica (basic), Python (basic), R (basic), Excel (medium), Matlab (very basic), C (very basic)

Interests

Singing, Basketball, Teaching, Sports History