

WAH LOON KENG

An undergraduate theorist who loves solving real world problems in math, computer science and physics.

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<https://github.com/kengz>

EDUCATION

Lafayette College, Pennsylvania

B.S. in Mathematics, Minor in Computer Science

expected May 2016

Overall GPA: 3.86

AWARDS

Lafayette College Benjamin F. Barge Mathematical Prize

2014

Second, Third - Lafayette College Barge Math Competitions

2013 - 2014

Second - LVAIC Regional College Math Competition

2012

Dean's List - Lafayette College

2012 - 2014

Gold, Top 5 team - National Physics Competition, Malaysia

2010

Gold - ICAS International Math Competitions, University of New South Wales

2009

RESEARCHES

Fulcrum Tech, Inc

Fall 2014 - Present

Email Standard Research

- Developed HTML email template that renders consistently with responsiveness across all email clients.
GitHub (private): `HTML-Email-with-Sass`, `html-email-generator`.

Perimeter Institute for Theoretical Physics Summer Student

Summer 2014

Quantum Foundations with Dr. Matthew Pusey and Dr. Tobias Fritz.

- Correlations in the C3 causal structure. Used Quantum Computation and Information theory to study the foundations and differences between quantum and classical physics.
Unpublished: `Correlations in C3` and `BlockCode` and `Bundled Form`, W.L. Keng.

Lafayette College EXCEL Program

Summer & Fall 2013

Computational Geometry with Dr. Ge Xia.

- Delaunay Triangulation, graphs, spanner problems. Proved that the Yao-5 graph, useful in wireless networks, is a spanner, i.e. short distance always exists.
Published: `New and Improved Spanning Ratios for Yao Graphs`, Barba et.al.
GitHub: `Yao-Graph-Research`.

WORK EXPERIENCE

Email Researcher and Coder, Fulcrum Tech, Inc

2014 - Present

Graphic Designer and Proctor, Lafayette College Foreign Languages Dept.

2014 - Present

Physics Student Grader, Lafayette College

2012 - Present

Physics Supplemental Instructor, Lafayette College

Spring 2014

LANGUAGES

Computer

Proficient: Java, C++, HTML/CSS/Sass, Mathematica, LaTeX
Elementary: C, Python, Matlab

Spoken

Fluent: English, Chinese, Malay, Cantonese, Hokkien

COURSES

Freshman

MATH 263 Calculus III
MATH 264 Differential Equations
MATH 312 Partial Differential Equations
PHYS 151 Accelerated Physics
PHYS 218 Oscillatory & Wave Phenomena

Sophomore

MATH 290 Transition of Theoretical Math
MATH 300 Vector Spaces
MATH 356 Real Analysis I
PHYS 342 Electromagnetic Fields
PHYS 351 Quantum Theory

PHYS 327 Advanced Classical Mechanics
PHYS 338 Advanced Physics Lab

Junior

CS 150 Data Structures and Algorithms
MATH 351 Abstract Algebra
MATH 358 Topology
MATH 391 Advanced Multivariable Calculus

Anticipated (Spring 2015)

CS 205 Software Engineering
CS 303 Theory of Computation
MATH 335 Probability