Wah Loon Keng

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EDUCATION

LAFAYETTE COLLEGE
BS in Mathematics
Minor in Physics
Dec 2015 | Easton, PA
Cum. GPA: 3.83 / 4.0

LINKS

Github: **kengz**
LinkedIn: **theoriesinpractice**
Google Scholar: **Wah Loon Keng**

COURSEWORK

UNDERGRADUATE

Advanced Algorithms
Artificial Intelligence
Senior Project: Machine Learning
Software Engineering
Theory of Computation
Data Structures & Algorithms

Fixed & Mixed Effect Models
Probability
Adv. Multivariable Calculus
Partial Differential Equations
Vector Spaces
Abstract Algebra
Topology
Real Analysis

Advanced Quantum Theory
Advanced Classical Mechanics
Advanced Physics Lab
Electromagnetic Fields
Oscillatory & Wave Phenomena

SKILLS

PROGRAMMING

Proficient:
Python • Node.js • Ruby
Basic:
Java • C++ • SQL • Neo4J
R • Mathematica • HTML • CSS/Sass

LANGUAGE

Fluent:
English • Mandarin • Malay
Cantonese • Hokkien

EXPERIENCE

ELIGIBLE INC | Software Engineer
March 2016 - present | Brooklyn, NY

- Internal platform and libraries for the Data Science team. In Python.
- Algorithms and machine learning for company products. In Python and Ruby.

SINGAPORE-ETH SMART CITIES LAB | Software Engineer
August 2015 - September 2015 | Singapore

- Traffic network optimization for urban planning using graph theory. In Java.

FULCRUMTECH, LLC | Software Engineer (part time)
Oct 2014 - July 2015 | Easton, PA

- Automated HTML templating and compilation and data transformer. In Node.js.

RESEARCH

LAFAYETTE COLLEGE | EXCEL Undergraduate Researcher
Summer 2015 | Easton, PA
Vertex Cover - studied its NP-hard complexity using Measure and Conquer. Under **Prof Ge Xia**.

Summer 2013 | Easton, PA
Yao Graphs - proved the existence of shortest paths for Y-5, and its inexistence in YY-5. Published in SOCG'14. Under **Prof Ge Xia**.

PERIMETER INSTITUTE | Student Researcher
Summer 2014 | Waterloo, Canada
Quantum Foundations - explored quantum paradoxes in the C3 causal structure using quantum computation and information. Under **Matthew Pusey** and **Tobias Fritz**.

PROJECTS

OpenAI Lab	An experimentation framework for Deep Reinforcement Learning.
AIVA	General-purpose virtual assistant for developers.
spacy-nlp	The official Node.js client for spaCy NLP.
dokkerJS	Dokker.js creates professional Javascript code documentations.
date	NLP-based date parser.

AWARDS

2014	Lafayette College Benjamin F. Barge Mathematical Prize
2013-14	2nd, 3rd, Lafayette College Barge Math Competitions
2012	2nd, LVAIC Regional College Math Competition
2010	Gold, Top 5 Team, Malaysian National Physics Competition
2009	Gold, ICAS International Math Competition

PUBLICATIONS & NOTES

[1] Barba et.al. *New and Improved Spanning Ratios for Yao Graphs.* **SOCG'14**, in press.
[2] W.L. Keng. *Correlations in C3.* **Perimeter Institute**, research note.
[3] W.L. Keng. *BlockCode and Bundled Form.* **Perimeter Institute**, research note.