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

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

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
- Started and built the company's data platform and pipeline automation.
- Created products with machine learning and search algorithms.

SINGAPORE-ETH SMART CITIES LAB | Software Engineer
August 2015 - September 2015 | Singapore
- Traffic network optimization Java app for urban planning using graph theory.

FULCRUMTECH, LLC | Software Engineer (part time)
Oct 2014 - July 2015 | Easton, PA
- Data ETL and HTML/CSS templating for marketing email automation.

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

SLM-Lab	A framework for Deep RL using Unity, OpenAI Gym, PyTorch, Tensorflow.
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.

PUBLICATIONS & TALKS

[1] Barba et.al. *New and Improved Spanning Ratios for Yao Graphs.* **SOCG'14**, in press.
[2] Medium blog on deep reinforcement learning: https://medium.com/@kengz
[3] Tutorials on deep RL and OpenAI Lab. latest link: Dec 2017.

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