

Ieng Kit Ho (Nicholas)

EDUCATION

B.S., Computer Science and Statistics (GPA: 3.2/4)

University of British Columbia, Vancouver, BC

September 2013 — December 2016

- Official spring graduation in May 2017

iengkit@gmail.com

<https://iengkit.github.io>

+1 (604) 363-5865

PROJECTS PT. I

SKILLS

Programming languages

Proficient: Python, MATLAB, Java, R, SQL, LaTeX

Familiar: C, C++, Javascript, Erlang

Basic: PHP, Ruby

Other (Non-programming languages)

Familiar: Oracle DB, MongoDB, Apache Hadoop, Regression

Testing, Unit Testing, HTML5, JSON, XML, CSS, Node.js, REST, UML

- Computer Vision - Gaussian Filters (Python)
 - Computer Vision - Face Detection in a Scaled Representation (Python)
 - Statistical Learning Methods - Decision Tree Learning (R)
 - N-gram modeling with Markov Chains (Python)
 - Black-Scholes Model with Monte Carlo Simulation (Python)
 - Nextbus Android App (Java, Object-oriented Design, XML, APIs)
- Please visit <https://iengkit.github.io> for more information

PUBLICATION

[1] Shizgal, B.D., Ho, N. and Yang, X. *The computation of radial integrals with nonclassical quadratures* *Journal of Math. Ch.* (2016) - Springer International Publishing Switzerland. (2017) 55: 413. doi:10.1007/s10910-016-0689-5.

WORK EXPERIENCE

NSERC Student Researcher in Density Functional Theory

May 2016 — September 2016

- Tools: MATLAB, Maple, Mathematica.
- Worked on a pseudospectral algorithm based on non-classical orthogonal polynomials for computing radial integrals in Density Function Theory with additional applications to physics and engineering.
- Demonstrated advanced numerical programming skills.
- Co-authored (second author) a published research paper.
- Supervisor: Prof. Shizgal, B.D. (UBC Institute of Applied Mathematics), Statistical Mechanics Research Group

PROJECTS PT. II

- Probabilistic Algorithms for Rejection Sampling & Likelihood Weighting (R)
 - Horizon Flight App (Java, SQL, JavaScript, oracle DB, JDBC)
 - MCMC Gibbs Sampling Algorithm for Markov Random Fields (R)
 - K-fold cross validation algorithm (R)
 - Universal Puzzle Solver (C++)
 - Reinforcement Learning - G.R.I.D (Python)
 - Stochastic Local Search - Greedy WalkSAT (R)
 - Cultural Compass (Java, Object-oriented Design, JSON, Agile Methodologies, GWT, APIs)
- Currently working on:
- Wanderlust - Social Networking App
 - Ordering System for Coast Capital Savings - Industrial Software Engineering Project
 - Fast Parallel Matrix Multiplication Algorithm - Scientific Computing Project
 - LSTN-RNN with Python and Tensorflow - Deep Learning Project

Please visit <https://iengkit.github.io> for more information