Kafka Reyya
PhD candidate, at Waterloo Physics Intellligence Lab
Department of Physics, University of Waterloo, Waterloo, Canada

Last Updated : June 10, 2019
email: kafka.reyya@gmail.com
web: kafkablogs.com

Education

- **Georgia Institute of Technology** — Atlanta, GA
  PhD candidate; — *Since Aug. 2018*
- **University of Waterloo** — Waterloo, Canada
  Master of Science in Physics; GPA: 4.00 / 4.00 — *Aug. 2015 – Dec. 2017*
- **University of Indonesia** — Depok, Indonesia
  Bachelor of Physics; GPA: 3.96 / 4.00 — *Aug. 2011 – July. 2015*

Publications (5 Selected Publications)

- First Author, Second Author, Third Author, etc. **Papers Title Here.** *Journal Here* (2019)
- Kafka R., Doe J., Emilia C., Alexander T. **Superficial Neural Network for Analytical Continuation.** *Phys. Rev. Lett.* (2019)
- Alexander T., Emilia C., Kafka R., **New Method on Fast Learning Monte Carlo.** *Journal of Condensed Matter Physics.* (2018)
- Kafka R., Alexander T. **Dynamical Mean Field Theory for Boson.** *Phys. Rev. E.* (2018)
- Wellings M., Kafka R., Alexander T. **Thermoelectric of Strongly Correlated System.** *APS March Meetings.* (2017)

Full Publications: https://scholar.google.ca/citations?hl=en&user=lyMGnwIAAAAJ

Professional Experience

- **Google** — Mountain View, CA
  Data Scientist — *Jan - Sept 2018*
  - **Tensorflow**: TensorFlow is an open source software library for numerical computation using data flow graphs; primarily used for training deep learning models.
  - **Apache Beam**: Apache Beam is a unified model for defining both batch and streaming data-parallel processing pipelines, as well as a set of language-specific SDKs for constructing pipelines and runners.
- **Indonesian Institute of Sciences** — Depok, Indonesia
  Intern Researcher — *Jan - June 2015*
  - **High Energy Physics Modelling**: Modelling Cross-Section of Kaon Particle with Strange Electromagnetic Force with Python and C++ and numerous scientific libraries
  - **Mathematical Analysis of CERN Data**: Analysis the Cross-Section data of Kaon particle from CERN database.

Projects

- **ALPS v2.0 Libraries**:
  Contributed to ALPS Physics Libraries for DMFT calculation : https://github.com/ALPSCore/ALPSCore
- **TRIQS v2.1 Libraries**:
  Contributed to ALPS Physics Libraries for MaxEnt analytical calculation : https://github.com/TRIQS/triqs
- **Tight Binding of Topology Material**:
  Initiate Tight Binding Software Libraries in calculation of topological effect : https://github.com/TightBinding

Awards and Scholarship

- **Best Speaker on ISCPMS 2019** 2019
- **Canada Foreign Student Scholarship** ..... 2018 - present
- **LPDP Indonesia** ..... 2015 - 2017

Talks

- **ISCPMS 2019** ..... Feb 12, 2019
- **APS March Meetings** ..... March 22, 2018
- **Confrence on Mathematical Physics** ..... Sept 02, 2015
- **Guest Lecturer on Introduction of Many Body Physics** ..... July 20, 2015
- **Emacs Confrence, "How to use proper emacs"** ..... June 13, 2014

Miscellaneous

- **Teaching Assitant (TA) :**
  - Continuos Quantum Monte Carlo, 2019 (M.Sc Physics., Georgia Institue of Technology)
  - Machine Learning for Dummies, 2016 (B.Sc Physics., University of Waterloo)
  - Mathematical Physics I, 2014 (B.Sc Physics., Universitas Indonesia)

- **Lab Assistant (TA) :**
  - Optical Tweezers Lab, 2019 (M.Sc Physics., Georgia Institue of Technology)
  - ARPES lab, 2014 (B.Sc Physics., University of Waterloo)

- **Thesis Supervision :**
  - John Doe, 2019 (M. Sc Physics., ongoing)
  - Sulaeman Bona, 2014 (Bachelor Physics., 2014)

- **Technical Skills**
  - Linux Distribution Development
  - Language: Julia, Fortran, C++, JavaScript
  - HPC: MPI, JuliaDistributed, OpenMP, Job Distribution and Nodes.
  - Web Development: HTML5, CSS, ReactJS, Bootstrap, Django
  - Tools: Linux, Git, Emacs, Vim