KALYAN BHATTACHARJEE

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Data Scientist | Machine Learning Engineer

Data-driven, action-oriented solutions to challenging business problems

Business-minded aspiring data scientist with demonstrated expertise in machine learning and optimization and ability to deliver valuable insights via data analytics and advanced data-driven methods. Strong math background and experience in data analysis, machine learning, and statistics. Passionate about explaining data science to non-technical business audience.

EXPERTISE

- Data and Quantitative Analysis
- Predictive Modeling
- Data-Driven Problem Solving
- Optimization

- Data Mining and Visualization Tools
- Machine Learning Algorithms
- Statistical Analysis
- Research, Reports and Forecasts

PROFESSIONAL EXPERIENCE

CANON INFORMATION RESEARCH SYSTEMS. *(CiSRA)*
Machine Learning Research Intern, 2017 to Present

Designing optimized deep neural network for action understanding from videos.

➔ Developed intricate algorithms based on deep-dive statistical analysis and machine learning that were used to optimize DNN for video understanding.

➔ Analyzed and processed complex video data sets using analytics tools.

➔ Implemented meta-learning systems in the context of DNNs to reach higher convergence.

➔ Experience with natural language processing and text mining.

Quantifiable results:

- Boosting performance of DNN by **30%** for complex benchmarks.
- Contributed to CiSRA's codebase and presented results within Canon audience from Canon Inc.
- Contributed to this year's project plan funded by stakeholders and customers.

THE UNIVERSITY OF NEW SOUTH WALES. *(ADFA)*
Research Assistant, 2015 to 2017

Develop efficient algorithm to tackle computationally expensive optimization problems.

➔ Developed complex frameworks to deal with surrogate assisted and multi-fidelity approaches.

➔ Analyzed and processed large data sets to find underlying relationship using state of the art methods.

Quantifiable results:

- Boosting performance of existing approaches by 60% using surrogates.
- Frameworks are being downloaded and used worldwide.
- Published in several top journal and conference outlets and delivered several talks worldwide.
- Attracted several domestic and international funding to travel and collaborate with well-known researchers from USA, UK, China and Japan.

Teaching Appointments: Tutored first year undergraduate defense students design optimization and CATIA (ZEIT 1501) in S2-2016 at UNSW Canberra at ADFA.

EDUCATION

THE UNIVERSITY OF NEW SOUTH WALES, CANBERRA | **Ph.D. in Computer Science** (ONGOING)| **M.Tech,** IIT KHARAGPUR | **B.Tech,** IIT KHARAGPUR

OF NOTE

Data Analytics/Machine Learning Tools/Languages: TensorFlow, Scikit-Learn, Keras, Sonnet, Theano, CUDA, GPU, R, Python, MATLAB, SQL (ongoing), Hadoop (ongoing), C++, Microsoft Office, LaTeX

Publications and Presentations: Available at [Google Scholar](#).