

CONTACT  
INFORMATION

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## INTERESTS

Machine Learning, MLOps, FPGAs, HFT, HPC, RF Communications

PROFESSIONAL  
SUMMARY

Experienced mid-career software engineer with a FPGA-focused research background looking for a fresh challenge. Especially interested in applied AI and ML infrastructure projects (e.g. MLOps), with/without hardware acceleration (e.g. FPGAs/ASICs) as an auxiliary goal. Referees on request.

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**Work Experience**

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**Machine Learning Engineer (Contract), SAP Singapore**

Jun 2021 to Present

- Building enterprise search solutions for internal stakeholders using Elasticsearch/Opensearch stacks.
- Implementing DNN-based semantic-similarity algorithms for information retrieval and ranking of results.
- MLOps tooling: setting up labeling, data cleaning, and evaluation pipelines for efficient ML iterations.
- Tools/frameworks used (non-exhaustive): [Elastic|Open]search, Docker, Poetry, Kubernetes, Kibana, Grafana, etc.

**CTO/Founder, Inpact Technologies Pte Ltd (inPact.ai), Singapore**

May 2020 to Sep 2021

- Led product development across all aspects of machine learning, frontend, backend, and deployment.
- Hired and managed contractors and an intern to meet product development targets regularly.
- Hands-on experience with technologies/frameworks such as ReactJS/Redux/SASS, serverless, spaCy, and more.
- Handled business functions such as customer acquisition, investor relations, fundraising, marketing, and more.
- Raised S\$75K from Entrepreneur First, an international VC firm funded by some of the top investors in the world.

**Postdoctoral Research Associate, University of Sydney, Australia**

Oct 2017 to Dec 2019

- Research & development on a “High-Speed Machine Learning for RF Communications” project commissioned by the Australian Defense Agency, leading to a peer-reviewed publication at [MILCOM 2018](#).
- Contribution to other FPGA-based research projects in the lab on topics such as [on-chip training](#), [logic cell architecture design](#), and [automatic modulation classification](#). Total 5 research papers/posters published at peer-reviewed conferences.
- Supervision & guidance to undergraduate students on their final-year research projects.
- Sysadmin duties on available compute resources in the lab.

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**Education & Certifications**

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**Nanyang Technological University (NTU), Singapore**

Jan 2013 to Feb 2019

PhD, Computer Science & Engineering, Advisor: [Nachiket Kapre](#)Dissertation: [Dataflow Optimized Overlays for FPGAs](#)

Teaching Assistant: Programmable System on Chip (CE4054), Embedded Software Development (CE4052)

**Imperial College London, United Kingdom**

Oct 2009 to Jun 2012

Bachelors of Engineering (BEng), Electrical &amp; Electronics Engineering

**Machine Learning Engineering for Production (MLOps) Specialization, DeepLearning.AI**

Ongoing

4-module specialization offered through the Coursera MOOC platform. Focuses on best in-industry practices for deploying data-centric machine learning systems. Instructors include Andrew Ng (founder DeepLearning.AI and Coursera), Robert Crowe (Tensorflow Developer Engineer, Google), Laurence Moroney (Lead AI Advocate, Google), and more.

**Data Science Specialization, John Hopkins University**

Mar 2015 to Apr 2016

10-module specialization that covers concepts and tools essential for building effective data science pipelines. Capstone project on building a text-prediction R web-app, similar to the predictive text technology found in mobile phones today.