

Contact

www.linkedin.com/in/hongong
(LinkedIn)

Top Skills

High Performance Computing
Operating Systems
Fault Tolerance

Languages

Bahasa Melayu (Malay) (Limited Working)
English (Full Professional)
Chinese (Professional Working)

Certifications

Design Thinking Bootcamp
Competing on Business Analytics and Big Data

Hong H. Ong

Head of Data Science and Analytics | Data Strategy, Innovation & Transformation | Build intelligent enterprise powered with data-driven analytics

Kuala Lumpur

Summary

I have two decades of data intensive computing experience. I am passionate about applying data strategy together with business driven technology to solve industrial problems. I have a strong record of success in leading, managing and delivering top tier innovative technology to align and achieve organisation needs and goals.

I am currently the Head of Data Science and Analytics at Central Bank of Malaysia where I lead a team of data scientists and machine learning engineers responsible to provide advance analytics in the Bank. Prior to the Bank, I worked at MIMOS Berhad, Malaysia's national Applied R&D institute, where I led data vision and products roadmap for Artificial Intelligence, Data-intensive analytics, and Cloud IaaS & PaaS technologies. My early work experiences was in computational science and High Performance Computing (HPC) system runtime software and architecture at a prestigious US national laboratory to support groundbreaking scientific discoveries.

I hold a Ph.D. in Computer Science from UK and B.S and M.S in Computer Science from US. I frequently speak at international conferences, and contributed extensively to the industry through 52 filed patents, 2 book chapters and 80 refereed papers. Apart from my day job, I am serving as Industry Advisor to Universities and Advisory Consultant to public and private sectors.

In my spare time, beside spending quality time with my family, I enjoy learning about emerging technologies and various intelligent systems, particularly in the area of HPC and Machine Learning, and thinking about their applicability in private/public sectors and their social impacts.

Specialties:

- High Performance Computing
- Cloud and Big Data Analytic Technologies
- Artificial Intelligence Technologies
- IT Strategy & Technology Operations
- Business Strategic and Data-Driven Decision Making
- Project/Program Management

Experience

Central Banking Services Bank Negara Malaysia

Head of Data Science and Analytics

September 2020 - Present (1 year 4 months)

Kuala Lumpur, Federal Territory of Kuala Lumpur, Malaysia

I manage the data science & machine learning team at Central Bank of Malaysia that works on a broad range of problems, including monetary stability, financial stability, prudential supervisory and regulation, organisational analytics, and more. As a data leader, I lead the team's strategy & growth, along with engaging on the deep technical content the team is driving. As a team, we drive the data science and analytics vision in the Bank, which spans across strategy, people, processes and technology in supporting the Bank's move towards becoming a data and insight-driven organisation.

MIMOS Berhad

7 years 11 months

Senior Director, Corporate Technology

June 2015 - August 2020 (5 years 3 months)

Kuala Lumpur, Malaysia

During my tenure here, I headed three departments, namely Advanced Computing Lab (ACL), Accelerative Technology Lab (ATL), and Artificial Intelligence Lab (AIL).

ACL is recognized as particularly strong in the areas of system software and architecture. We investigate these areas in the context of emerging computing paradigms such as cloud computing, mobile computing, data-intensive computing, and edge computing, and explore their utilisation in supporting enterprise applications. Currently focusing on using lean virtualisation technologies to manage Internet-of-Things (IoTs) applications at the network edge. For storage area, our work focus on data protection and availability, long-term data preservation, and storage optimization. As for

network virtualization, we focus on cloud-based network policy and security. Since 2012, we have developed and deployed our cloud and storage platforms to public and private sectors.

ATL investigates the use of Accelerators such as Graphics Processing Units (GPUs) and Field Programmable Gate Arrays (FPGAs) for industrial and scientific applications. We applied the state-of-the-art of parallel computational algorithms and implemented them as libraries, interfaces, or accelerative components. Since 2012, ATL has developed and deployed to industries including GPU Graph/Text Analytics, GPU Image Processing for Multi-Video Analytic, GPU SQL query Accelerator, and GPU Accelerated Library (Mi-AccLib).

AIL focuses on Artificial Intelligence technology to develop high performance Intelligent Big Data Analytics. The R&D team applies Data Science and Knowledge Science technologies like Machine Learning, Semantic Technology, large scale Graph Analytics, and Natural Language Processing for deriving insights from the unstructured and structured data. We have been applied the technology to Domain Knowledge Management, Enterprise Performance Management, Online Analytical Processing, Predictive Analytics and Prescriptive Analytics.

Director

October 2012 - May 2015 (2 years 8 months)

eManual System Sdn Bhd

Chief Technology Officer

April 2012 - September 2012 (6 months)

Kuala Lumpur, Federal Territory of Kuala Lumpur, Malaysia

Developed the innovation framework to meet business objectives.

Developed the company's go-to-market strategy.

MIMOS Berhad

Principal Researcher

June 2010 - March 2012 (1 year 10 months)

Applied R&D in broad aspects of reliability and security in distributed systems, particularly in Infrastructure-as-a-service. Direct report to Chief Technology Officer.

Oak Ridge National Laboratory (ORNL)

Sr. HPC Research Scientist

April 2005 - August 2009 (4 years 5 months)

Conducted R&D to determine the best way to approach system tools and libraries as well as recommending the best path forward for application and system resiliency development on petascale computers

Conducted R&D into cluster computing techniques, tools, algorithms, and high-performance networking hardware.

University of Portsmouth

Post-Doctoral Research Associate

November 2003 - March 2005 (1 year 5 months)

Conducted R&D in the area of resource management for distributed computing. Deployed and maintained the UK e-Science OGSA Grid Testbed infrastructure

Education

University of Portsmouth

Ph.D, Computer Science · (2001 - 2004)

Kent State University

M.Sc, Computer Science · (1996 - 1999)

Kent State University

B. Sc, Computer Science · (1991 - 1996)