

Jiradett Kerdetsri, Ph.D.

linkedin.com/in/jiradett/

Email : jiradett@gmail.com

Mobile : +61 4 5118 9377

EDUCATION

- **Sirindhorn International Institute of Technology** Pathumthani, Thailand
Ph.D. in Engineering and Technology 2011 - 2015
- **University of Melbourne** Victoria, Australia
Master in Geographic Information Technology 2008 - 2009
- **US Naval Postgraduate School** California, USA
Master in Computer Science 2001 - 2003
- **Air Force Academy** Bangkok, Thailand
Bachelor in Civil Engineering 1994 - 1999

EXPERIENCE

- **Data Engineer** Melbourne, Australia
Parliament of Victoria Dec 2021 - Present
 - **Building, managing, and operationalizing data pipelines:**
 - * Collaborate with internal and external stakeholders, maintaining, and constant improvement of enterprise data frameworks for continuous use.
 - * Driving the design, development, and deployment of ETL and analysis of data platform solutions.
 - * Develop data products delivered through pipelines incorporating automated testing, version control, and DevOps.
 - * Assist with renovating the data management infrastructure to drive automation in data integration and management.
 - Use modern data preparation, integration, and AI-enabled metadata management tools and techniques.
 - Tracking data consumption patterns.
 - Performing intelligent sampling and caching.
 - Monitoring schema changes.
 - Automating existing and future integration flows.
 - * Being an owner of Azure API Management tool and the Azure Service Bus.
 - **Collaborate across the business and IT:**
 - * Refining their requirements for various data and analytics initiatives and their data consumption requirements.
 - * Determine product management and develop DataOps requirements to build data products aligned to business teams and manage the data product lifecycle.
 - * Promote the available data and analytics capabilities and expertise to business unit leaders.
 - * Ensure data governance and compliance and participate in vetting and promoting content created in the business to the curated data catalog for governed reuse.
 - **Drive Automation through effective metadata management:**
 - **Education and Training:**
 - * Train stakeholders in data pipelining and data preparation techniques.
 - * Develop and deliver education and training workshops
 - **Organisational:**
 - * Provide support to the platform administrators and web developers.
 - * Support IT unit's business plan and strategic directions.
- **Deputy Director of Data Analytics**
Bank of Thailand Oct 2018 - Oct 2021
 - **Chief Data Scientist:** Leading the core-data scientist team to make use of micro/granular data and alternative data (big data) to augment insights found from aggregated data through the use of artificial intelligence, machine learning, text processing, and network theory.

- **Data Architect:** Involve with enterprize data architecture, data engineering process, data strategic, and data pipeline to achieve the goal of data-driven organization.

- **Director of Data Communication**

Defense Technology Institute

Jul 2009 - Oct 2018

- **Research topics:** Big data, Data analytics, Artificial Intelligence, Machine (deep) Learning (mainly on Computer Vision), Opportunistic Network, MANET, Tactical Network, etc.
 - * Lead and manage data communication laboratory for research and functional projects.
 - * Software implementations mainly on JAVA, PHP, and Python.
 - * Project manager for software implementation, basic research and research publication.
 - * Manage and maintain organization KPI on research publications.
 - * Organizing the international conference on defense research.
 - * Provide knowledge management for basic research, ICT projects, and research publications.
 - * Support director of research and development with technical reports.
 - * Coach and mentor the associate researchers on research methodology.
 - * Suggest technology initiatives and implementation plans for related defense research projects.

- **Lecturer**

International Hospitality Management School VATEL

May 2013 - Sep 2018

- **Invited lecturer:**
 - * Implemented and managed ICT curriculum for VATEL.
 - * Teaching information technology for the hospitality business course.

- **IT Administrator & Sales**

Something Aussie

Melbourne, Australia

Jan 2008 - Jan 2009

- **IT and Sales support:**
 - * Managed IT infrastructure for the shop, including online payment, PoS, CRM, and website.
 - * Responsible for sales and marketing.
 - * Maintained the website and online orders.
 - * Supported the PR team, and social media marketing.

- **Software Developer**

Ministry of Defence

Mar 2003 - Jul 2009

- **Programming and System Administrator:**
 - * Implemented and develop the application for Command, Control, Communications, Computers, & Intelligence (C4I) system.
 - * Worked on data analytics for Geographic Information System (GIS) and spatial analysis.
 - * Worked with US Department of Defence on Multinational Communications Interoperability Program (MCIP).
 - * Developed communication application for Counter Terrorist Operations Center (CTOC).
 - * Worked with the United Nations for the peacekeeping mission.

- **Student Pilot**

Air Force

Oct 1999 - Oct 2000

- **Tranied Aircrafts:**
 - * PAC CT/4 Airtrainer.
 - * Bell 206 JetRanger/LongRanger Multipurpose utility helicopter.

PUBLICATIONS

JOURNALS

- [1] Jiradett Kerd Sri and Tawiwat Veeraklaew. "Visualization of Spatial Distribution of Random Waypoint Mobility Models". In: *Journal of Computers* 12.4 (2017), pp. 309–316.
- [2] Jiradett Kerd Sri and Komwut Wipusitwarakun. "Dynamic Rendezvous Based Routing Algorithm on Sparse Opportunistic Network Environment". In: *International Journal of Distributed Sensor Networks* 11.2 (2015), p. 819178. DOI: 10.1155/2015/819178.
- [3] Jiradett Kerd Sri and Komwut Wipusitwarakun. "DORSI : Data-wise Opportunistic Routing with Spatial Information". In: *Journal of Convergence Information Technology* 8.August (2013), pp. 91–103.
- [4] Jiradett Kerd Sri, Tawiwat Veeraklaew, and Settapong Malisuwan. "Randomized Replication based on Multilevel of Security for Opportunistic Network". In: *International Journal of Electronics and Electrical Engineering* 1.2 (2013), pp. 115–119. DOI: 10.12720/ijeee.1.2.115-119.
- [5] Jiradett K. and Ornin S. "The Safety of WiMAX Insolid Propellant Rocket Production". In: *International Journal of Electronics and Communication Engineering* 5.6 (2011), pp. 747–749. ISSN: eISSN: 1307-6892. URL: <https://publications.waset.org/vol/54>.

CONFERENCE PROCEEDINGS

- [1] Jiradett Kerd Sri and Tawiwat Veeraklaew. "Opportunistic Network Informatics using Deep Learning". In: *2018 International Conference on Information and Social Science*. Apr. 2018.
- [2] J. Kerd Sri et al. "A long-range low-power wireless sensor network based on U-LoRa technology for tactical troops tracking systems". In: *2017 Third Asian Conference on Defence Technology (ACDT)*. Jan. 2017, pp. 32–35. DOI: 10.1109/ACDT.2017.7886152.
- [3] J. Kerd Sri and T. Veeraklaew. "Analysis of energy and mobility model on opportunistic routing algorithms". In: *2015 11th International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QSHINE)*. Aug. 2015, pp. 60–65.
- [4] Jiradett Kerd Sri and Komwut Wipusitwarakun. "Data-wise Routing in Virtualization Environment (DRIVE) with multiple level of security for tactical network". In: *2012 IEEE/SICE International Symposium on System Integration (SII)*. IEEE, Dec. 2012, pp. 933–938. ISBN: 978-1-4673-1497-8. DOI: 10.1109/SII.2012.6427357.
- [5] J. Kerd Sri and K. Wipusitwarakun. "Data-wise Routing in Virtualization Environment (DRIVE) with multiple level of security for tactical network". In: *2012 IEEE/SICE International Symposium on System Integration (SII)*. Dec. 2012, pp. 933–938. DOI: 10.1109/SII.2012.6427357.
- [6] J. Kerd Sri and K. Wipusitwarakun. "Network virtualization for military application: Review and initial development of conceptual design". In: *2012 14th International Conference on Advanced Communication Technology (ICACT)*. Feb. 2012, pp. 61–66.
- [7] Jiradett K., Ornin S., and Teeranun S. "The use of RFID in solid propellant rocket production management system". In: *publication description World Academy Science Engineering and Technology*. July 2010.

BOOKS

- [1] *iPhone 5s/c Complete user guide*. SE-EDUCATION, 2013. ISBN: 9786167240343.
- [2] *Samsung Galaxy S4 the Complete Manual*. SE-EDUCATION, 2013. ISBN: 9786167240329.
- [3] *Samsung Galaxy Note 2*. SE-EDUCATION, 2012. ISBN: 9786167240312.
- [4] *Max OS X Mountain Lion*. SE-EDUCATION, 2012. ISBN: 9786167240299.
- [5] *Samsung Galaxy S3: How to use*. SE-EDUCATION, 2012. ISBN: 9786167240275.
- [6] *Wiki, Knowledge Management System*. SE-EDUCATION, 2007. ISBN: 9789749560136.
- [7] *SNMP over Wi-Fi wireless networks*. Storming Media, 2003. ISBN: 1423503287.

CERTIFICATES

- **Microsoft Azure for Data Engineering:** Coursera
- **Azure Service Bus for Developers:** Udemy
- **Apache Spark SQL for Data Analyst:** Coursera
- **ISO/IEC 27701:2019:** BSI
- **Deploy Machine Learning & NLP Models with Docker (DevOps):** Udemy
- **The Data Scientist's Toolbox by Johns Hopkins University:** Coursera
- **Deep Learning Institute Fundamentals Workshop:** NVIDIA
- **Power BI:** DataCube
- **Using Python to Access Web Data:** Coursera
- **Data Analytics and Big Data using Opensource:** Kasetsart University
- **Introduction to Data Science in Python:** Coursera
- **Big Data Analytic using Hadoop and Spark:** IMC Institute
- **Leadership:** FranklinCovey
- **Smart Professional Image for Project Manager Program:** John Robert Powers
- **Python for Everybody Specialization:** Coursera
- **Big Data Training Course:** Udemy

DATA CONSULTANT

- **Pro Technical Info Services Co.Ltd.:** Provide consultative guidance on deploying big data analytics concepts to project.
- **ENergy SOLution (ENSOL):** Provide consultative guidance on collecting and analyze IoT data from various sensors.

SPEAKING ENGAGEMENTS

- **Chief Data Scientist Conference:** Keynote Speaker: Enabling data generation to feed the need of machine learning, Bangkok, Thailand, 2020.
- **World AI Show:** Panelist: Enabling Innovation Through Effective Digital Transformation, Intercontinental, Bangkok, Thailand, 2019.
- **Enterprise AI Conference:** Keynote Speaker: Data Analytics for Central Bank, Grand Mercure Bangkok Fortune, 2019.
- **2nd Annual Analytics Leader Summit:** Keynote Speaker and Panelist: Data Analytics for Bank of Thailand, Mercure Manila, Philippines, 2019.
- **3rd Annual Analytics Leader Summit:** Keynote Speaker and Panelist: Data Analytics for Bank of Thailand, Ayana Mid Plaza, Jakarta, Indonesia, 2019.
- **1st Annual Analytics Leader Summit:** Keynote Speaker: Military AI Research, Bangkok, Thailand, 2019.
- **SmartCom 2018 -The 5th International Workshop on Smart Wireless Communications:** Invited Talk: Opportunistic Network Informatics using Deep Learning, Mandarin Hotel, Bangkok, Thailand, 2018.

PROJECTS

- **Unfit Banknote Classification [2019]:** Use Convolutional Neural Network (ConvNet/CNN) for modeling the machine learning classification to identify the unfit note for banknote production.
- **Computer Vision for Vehicle detection [2017]:** Develop a deep learning program to detect the vehicle (brand, model, color and year) for CCTV using Python and TensorFlow.
- **Organizing international conference on defense technology (ACDT):** Responsible for organizing Asian Conference on Defence Technology (ACDT) which started from 2015 and held annually:
 - **The First Asian Conference on Defence Technology:** Huahin, Thailand, 23 – 25 April 2015.
 - **The Second Asian Conference on Defence Technology and The First Pacific Rim International Workshop on Defence, Safety, and Security Technology:** Chiang Mai, Thailand, 21 – 23 January 2016.
 - **The Third Asian Conference on Defence Technology:** Phuket, Thailand, 18 – 20 January 2017.
 - **The Fourth Asian Conference on Defence Technology:** Tokyo, Japan, 29 November – 1 December 2017.
 - **The Asian Conference on Defence Technology 2018:** Hanoi, Vietnam, 25 - 27 October 2018.

- **Intelligence Data-Link Analysis for Checkpoint Operations (IDA-CHO) [2017-2018]:** The co-research project with National Electronics and Computer Technology Center (NECTEC) developed on: - Graph Database: Neo4j - Link Analysis: Python, Cypher (Neo4j's graph query language) - Graph Visualization: CytoScape, PostMan, WebApp2, JinJa2, Javascript, Bootstrap
- **Internal ballistic simulation software [2013-2015]:** Develop a simulation software for rocket internal ballistic using JAVA.
- **Common Operation Picture (COP) [2012-2014]:** Develop a situational awareness application for Thai Armed Forces based on C# and Google Map Enterprise with the Data Distribution Service (DDS) communication..
- **Multinational Communications Interoperability Program (MCIP) [2008]:** The program to test the interoperability for communication systems among US and ASEAN countries.
- **Management information system (MIS) for the criminal court [2004-2005]:** Implement the paperless information system to replace conventional system. The system was deployed on JSP and Oracle database.
- **Fabric pattern selection software [2003-2004]:** Develop a fabric pattern selection software for The Foundation For the Promotion of Supplementary Occupations and Related Techniques under the Royal Patronage of Her Majesty the Queen using PHP.
- **Negotiations software for anti-terrorist communication system [2003-2004]:** Implement a software for multi-users communications (Twitter-like) for negotiations in anti-terrorist mission for Counter Terrorist Operations Center (CTOC) using PHP.