

RISCHAN MAFRUR

HIGHLIGHT

Currently, I am a researcher and data scientist at SIRCA Ltd, Sydney Australia. I work with Australian Stock Exchange (ASX) data and am building a [crypto data warehouse](#). I have a passion for data and analytics, and most recently, my focus has been on Fintech, especially Decentralized Finance (DeFi) analytics.

I graduated with a Ph.D. in Data Science from The University of Queensland, Australia, with a [thesis in data exploration and visualization](#). Recently, I have used my writing slot time to write crypto research and analytics articles, which can be seen through this link: <https://medium.com/@diteliti>.

CURRENT AND RECENT POSITION

SIRCA Ltd and CryptoDataWarehouse, Sydney, Australia (Remote 2023 - present)

Data and Research:

- **Securities Industry Research Centre of Asia-Pacific (SIRCA Ltd)**, Duty: Responsible for delivering high-quality data to SIRCA customers. (2023 - present)
- **Crypto Data Warehouse Australia**, Duty: Building a crypto data warehouse for SIRCA. (2023 - present)

The University of Queensland, Brisbane, Australia (2020 - 2023)

Teaching:

- **Advanced Database Systems (INFS3200)**, Course Coordinator: Prof Xue Li, Duty: Delivering tutorials and practical sessions, marking projects and exams (2021 - 2023)
- **Database Principles (INFS7901)**, Course Coordinator: Dr Ash Rahimi (2020/2021), Dr Rocky Chen (2022), Duty: practical sessions, marking projects and exams (2020 - 2023)

Kaggle, Remote

Competition Expert:

- Kaggle Competition Expert (Rank 413 of 179,920 globally)
- Top 3% (Silver Medal) Jane Street Market Prediction Competition
- Top 4% (Silver Medal) Cornell Birdcall Identification Competition

Covalent Web3 Data Alchemist, Canada (2022)

4-week bootcamp held by Covalent in November 2022, 1200 applicants registered, 250 were selected, and 125 completed the bootcamp. The bootcamp consist of four modules and four challenges, data alchemists who can do all the challenges receive 20000 \$CQT as the reward and become Covalent Web3 Data Alchemist fellows.

- **Award outstanding content creator** I received *all above and beyond awards* as the outstanding content creator and had a chance to share my learning experience during bootcamp at the closing of Covalent Data Alchemist bootcamp [\[link\]](#).
- **My analysis** First challenge: I compared STEP N vs Step app in terms of reach, retention, and revenue [\[link\]](#). Second challenge: I did analysis on the FTX public wallets during FTX meltdown [\[link\]](#). Third challenge: I compared APE/WETH pool on Uniswap vs Sushiswap [\[link\]](#). Last challenge: I compared three NFT marketplaces, LooksRare vs Opensea and X2Y2 in terms of reach retention and revenue [\[link\]](#).

EDUCATION

The University of Queensland, Australia

Graduated with a PhD in Data Science in 2023., School of Electrical Engineering and Computer Science

- Thesis: Recommending data visualizations: tackling diversification and data quality challenges
- Advisor: Professor Guido Zuccon

Chonnam National University, Gwangju, South Korea

M.Eng., School of Electronics and Computer Engineering (2013 – 2015)

- GPA: 4.38/4.50
- Thesis: *Modeling and Discovering Human Behavior from Smartphone Sensing Life-Log Data*
- Advisor: Professor Deokjai Choi

Sunan Kalijaga State Islamic University, Yogyakarta, Indonesia

B.Eng, Informatics Department (2009 – 2013)

- GPA: 3.74/4.00 (1/512 students)
- Thesis: *Study comparison of the first year IT students in terms of the understanding the basic concept of algorithm using traditional teaching method versus using IndoBlockly (Web application created by Rischan Mafrur)*
- Advisor: Agung Fatwanto, PhD

RESEARCH INTERESTS

Data Exploration, Data Visualization, Data Warehouse, Blockchain, Cryptocurrency, Digital Assets (NFTs).

PROGRAMMING SKILLS AND APPS

Python, Pandas, SQL, GraphQL, Docker, Linux System Administration, Github.

INTERNATIONAL PUBLICATIONS

- [1] **Rischan Mafrur**, Mohamed A. Sharaf and Guido Zuccon, “Efficient Diversification for Recommending Aggregate Data Visualizations”, IEEE Access, 2023.
- [2] **Rischan Mafrur**, Mohamed A. Sharaf and Guido Zuccon, “Quality Matters: Understanding the Impact of Incomplete Data on Visualization Recommendation”, *DEXA '20 The 31st International Conference on Database and Expert Systems Applications*, September 14 - 17, 2020 , Bratislava, Slovakia.
- [3] **Rischan Mafrur**, Mohamed A. Sharaf and Hina A. Khan, “DiVE: Diversifying View Recommendation for Visual Data Exploration”, *CIKM '18 Proceedings of the 27th ACM International Conference on Information and Knowledge Management*, October 22 - 26, 2018 , Torino, Italy.
- [4] **Rischan Mafrur**, I Gde Dharma Nugraha and Deokjai Choi, “Modeling and discovering human behavior from smartphone sensing life-log data for identification purpose”, *International Journal of Human-centric Computing and Information Sciences*, Vol. 5 (2015), pp. 1-18.
- [5] **Rischan Mafrur**, Priagung Khusumanegara, Gi Hyun Bang, Do Kyeong Lee, I Gde Dharma Nugraha and Deokjai Choi, “Developing and Evaluating Mobile Sensing for Smart Home Control”, *International Journal of Smart Home*, Vol. 9, No. 3 (2015), pp. 215-230.

- [6] **Rischan Mafrur**, M Fiqri Muthohar, Gi Hyun Bang, Do Kyeong Lee, Kyungbaek Kim and Deokjai Choi, “[Twitter Mining: The Case of 2014 Indonesian Legislative Elections](#)”, *International Journal of Software Engineering and Its Applications*, Vol. 8, No. 10 (2014), pp. 191-202.
- [7] Priagung Khusumanegara, **Rischan Mafrur** and Deokjai Choi, “[Why Smartphone Users Accessing Facebook Through Facebook Mobile Website?: Battery and Privacy Awareness](#)”, *International Journal of Multimedia and Ubiquitous Engineering*, Vol. 10 , No. 8 (2015), pp. 339-346.
- [8] **Rischan Mafrur**, I Gde Dharma Nugraha and Deokjai Choi, “[Concept, Design and Implementation of Sensing as a Service Framework](#)”, *ACM IMCOM, The 9th International Conference on Ubiquitous Information Management and Communication*, January 2015, Bali, Indonesia.
- [9] **Rischan Mafrur**, M. Fiqri Muthohar, Gi Hyun Bang, Do Kyeong Lee and Deokjai Choi, “[Awareness Home Automation System Based on User Behavior through Mobile Sensing](#)”, *CUTE 2014, The 9th KIPS International Conference on Ubiquitous Information Technologies and Applications*, December 2014, Guam, USA.
- [10] Priagung Khusumanegara, **Rischan Mafrur** and Deokjai Choi, “[Profiler for Smartphone Users Interests Using Modified Hierarchical Agglomerative Clustering Algorithm Based on Browsing History](#)”, *ICT-Eurasia 2015/CONFENIS 2015: 89-96*, October 2015, Daejeon, South Korea.

PAST WORK EXPERIENCE

The Ministry of Education and Culture (MoEC), Indonesia

Data and AI Consultant (July 2021):

- [belajar.id](#), The Ministry of Education and Culture (MoEC) Republic Indonesia launched a national account program in 2019, in which the ministry provided a national email account for 27 million students as well as 3.4 million teachers. As a data scientist, I have to achieve the expected output: report of the findings, include (but not limited to) the research methodology, data exploration and observations, and recommendations on how to increase the activation and adoption rate.

Kartoza (Pty) Ltd, Open Source Geospatial Solutions, Western Cape, South Africa

Software and Database Engineer (2015 – February 2017)

Projects that I was working on are as follows:

- **Projecta** , Visual changelogs for software releases and for managing a software project at a high level. This is an open source project. (10/2015 – 2016)
- **AgriTechnovation**, Farms view and managing farm lands in South Africa (10/2015 – 01/2016)
- **SANSA Catalogue**, SANSA (South Africa National Space Agency) Earth Observation Online Catalogue. (01/2016–05/2016)

Chonnam National University, South Korea

Researcher (2013–08/2015)

- Intelligent User Interface Platform for Next Generation Mobile Devices (funded by NRF(National Research Foundation of Korea)) (2014–2015)
- Mobile Device Interface Research Center (MDIRC) group (2014)

- Wi-Fi Handover Technique Development (incorporate with RedOne Technologies Co., Ltd., South Korea) (funded by NIPA) (09/2013–02/2014)

Universitas Terbuka in South Korea

- A Temporary Lecturer (2014)
- Basic Statistics (2014)
 - Social Statistics (2014)

PTIPD (Center of Information Technology and Data Center)

- Web Developer (01/2012–6/2013)
- Developing Online Registration System for KKN (Kuliah Kerja Nyata) based on CodeIgniter Framework with Restful API and Oracle Database.

Sunan Kalijaga State Islamic University, Yogyakarta, Indonesia

- Teaching Assistant (2010–2013)
- Algorithms and Data Structures (C++) (2010)
 - Operating System (Linux) and Bash Scripting Language (2010, 2012)
 - Visual Programming Language (Borland Delphi) (2011)
 - Database (MySQL and Oracle) (2011)
 - Structured Programming (C Procedural) (2011, 2012)
 - Object Oriented Programming (Java) (2012)
 - Web Programming (PHP) (2012)
 - Information System (2012, 2013)
 - Mobile Computing (Android) (2012, 2013)
- Research Assistant (2010–2012)
- Learning Vector Quantization for Javanese Characters Recognition, Supervised by DR. Shofwatul 'Uyun, M.Kom, (2012)
 - Digital Image Processing for Blocking Porn Images in Android Platform (Grant research sponsored by Directorate General of Higher Education), Supervised by DR. Shofwatul 'Uyun, M.Kom, (2011–2012)
 - Developing Firefox Add-ons for Blocking Unwanted Contents, Especially Nude Images. This research supported by Faculty of Science and Technology, Sunan Kalijaga State Islamic University, Supervised by DR. Bambang Sugiantoro, M.T, Com TIA (2013)

COURSES AND CERTIFICATIONS

- Blockchain and Smart Contract Security
- Blockchain: Beyond the Basics
- What is Web3?
- Google Cloud Platform Big Data and Machine Learning Fundamentals
- Building Batch Data Pipelines on GCP
- Building Resilient Streaming Analytics Systems on GCP
- Modernizing Data Lakes and Data Warehouses with GCP
- Smart Analytics, Machine Learning, and AI on GCP
- Machine Learning for Business Professionals
- Developing AI Applications on Azure
- Getting Started with AWS Machine Learning

LANGUAGES	Javanese (Java Island, Indonesia)	Native (mother tongue)
	Indonesian	Native
	English	IELTS : 6.5 (overall, 2017 test result)
	Korean	Very Beginner
	Arabic	Very Beginner
PERSONAL INFORMATION AND LINKS	Email	rischanlab@gmail.com
	Gender	Male
	Nationality	Indonesia
	Religion	Islam
	Status	Married
	LinkedIn	linkedin.com/in/rischan
	Youtube Channel	youtube.com/rischanlab
	Online CV	rischanlab.github.io
	Website	medium.com/@diteliti
	Google Scholar	Rischan Google Scholar
	Github Profile	github.com/rischanlab
	Kaggle	kaggle.com/rischan