

# Thomas **Thio** | Tokyo

**IMPORTANT:** Singaporean, with 5 Year Japan Work Visa (from Feb 2020)

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**Portfolio:** <https://pathbrite.com/thomasthio/SgBO>

- Proficient in C#, C++, Java and Python
- Experienced in API connectivity and interop
- Intellectually curious, collaborative and high EQ
- Strong communicator
- Results-driven, excels in fast-paced environment
- Highly mobile and open to global relocation

## EXPERIENCE

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### **Rakuten Inc (Japan)**

**Mar 2020 – Present**

*Software Engineer, Tokyo*

- AD Delivery Team, Ad Core Platform
- Java, Linux

### **Theme International Trading SPC (Liquidity Provider & Prop Trader)**

**Jan 2019 – Dec 2019**

*Trading Engineer, Singapore*

- Enabled automated market-making on illiquid and mature markets, generating USD\$12K monthly profit per product. Responsible for agriculture and FX products in the US and SEA.
- Wrote inhouse trading GUI and connections to brokers, trading software and data vendors using C++, Python, and C#. Writing trading strategies and order management algorithms.
- Influenced add, hold or cut decision-making criteria via seasonality analysis of spreads and hedge options, and identifying fair values and optimal holding times in a random forest ensemble and spread permutations.
- Excel RTD plugins to extract data and positions from legacy software. Scripts to compute position statements and PNL, speeding up reconciliation by 2.5x.

### **Independent Consulting (Business Process, Software)**

**Jan 2018 – Jan 2019**

*Selected Projects*

- Process mapping & data management for route optimization of warehouses, drivers & end points in the US.
- Achieved 0.3 loss for custom image and object recognition on Raspberry Pi using Tensorflow & AWS for London client.

### **Research Room (Data Science & Management Consulting)**

*Analytics Developer (Intern)*

**Dec 2017 – Feb 2018**

- Research on Fama-French factor models and discovery of beta with alternative data sets.
- Text mining with ESA techniques on conference calls and financial dictionaries to analyze sentiment pairs using nltk and genism.
- Built knowledge graph of documents, allowing keyword search searching of key topics via semantic relatedness and authority of papers using graph-tools and Django.

### **GUTTZ Pte Ltd (Enterprise Software)**

**Sept 2013 – April 2016**

*Information Systems Analyst*

- Coordinated product development of new software features between developers, testers and clients. Led market research and ensured deliverables are on time and of quality.
- Optimized software development life cycle (SDLC) processes achieving 15-25% faster turnaround of new features from request to deployment.
- Proposed and led re-design of sales intelligence dashboards, providing additional revenue channel.

- Implemented templates to speed up replies to product inquiries by 20%.

## EDUCATION

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### Singapore Management University

Aug 2014 – Jun 2018

*Bachelors of Science in Information Systems with High Merit, 2<sup>nd</sup> major in Advanced Business Technology*

- GPA of 3.34/4.0, Recipient of SAS Institute Bachelor of Science Scholarship.
- Awarded Best Final Year Project for Technical Complexity. Built teaching load system to raise accuracy and efficiency in allocating supply of faculty and demand of courses.
- Distinctions in Data Mining, Modelling & Simulation, Visual Analytics, Financial Markets, Internet-Of-Things

### Temasek Polytechnic

Apr 2009 –Sept 2012

*Diploma in Communications & Media Management with Merit, Specialization in Marketing*

- Top 10% of cohort for 3 consecutive years.
- Course Council Treasurer, managing cash and accounts. Developed fundraisers bringing \$1500 for cost of \$300, meeting at least 80% of yearly budget required.
- Overseas exchange to University of Western Australia, Perth.

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## SKILLS & CERTIFICATIONS

- Proficient with Python, Java, C#, SQL/NoSQL, Git. Wide use of TensorFlow, Keras, pandas, scikit-learn, Spark, Hadoop, JSON/XML scraping.
- Familiar with RapidMiner, JMP Pro, SAS EM, VDDML, Tableau, SPSS, Gephi, Qlik, Power BI. Familiar with Deployments in AWS, Heroku & CloudFoundry, Databases in Oracle, SQL Server, CouchDB.
- Attended IEEE [Multi-Robot Systems Summer School](#) and [Autonomous Agents & Multi-Agent Systems](#), covering artificial intelligence planning and multi-agent robot systems.
- Certificates in Machine learning (Coursera), CompTIA and ISC2 CISSP (Cybrary).

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## AWARDS & ACCOMPLISHMENTS

- Led development and teaching of introductory programming curriculum on request for university friends and overseas community project in Vietnam.
- Top 4% of Kaggle leaderboard rankings in time series store sales forecasting in Data Mining project.
- Featured on [SMU's Facebook](#), [Channel 8](#), & LianheZaoBao on digital strategy recommendations for Ministry of Foreign Affairs' Travel e-Registration services.
- Research Assistant working on flagship SMU-X Statistics project that was featured in the [Straits Times](#).
- Finalist in the 13<sup>th</sup> Start-Up @ Singapore business plan competition. Went through 3 rounds of judging and presented to audience of five hundred.
- Represented Singapore Chinese Football Club in the Singapore National Football League (NFL) from 2010-2011, winning 2<sup>nd</sup> in 2010.
- Clinched 2<sup>nd</sup> in the 2009/2010 POLITE games for representing Temasek Polytechnic in Soccer.

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## HOBBIES & OTHERS

- Running & football, to maintain mental and physical stamina, with occasional mountain climbs to push my limits.
- Financial data & equity analysis, strategy development for personal and family's portfolio needs.
- Merchant's Club (Commodity trading interest group). Researched fundamentals and trading strategies of Corn, Copper, and Crude Oil.