RICO

Solutions Lead

phanrico@gmail.com | +601123756246 | Indonesian

LinkedIn | linkedin.com/in/ricophan

SUMMARY

He is an Indonesian that been resides in Malaysia for more than 8 years while most of the time communicating in Chinese Mandarin, English, Indonesian, and Malay. He is also a Computer Science graduate that exposed to multiple programming languages that involving full-stack development, API development, tools integration, prompting, and cutting-edge technologies in digitalization such as RPA and Chatbots. On top of those, he also ventured into data driven ecosystems such as Analytics, Engineering, and Scientist while upholding a strong programming foundation and a fervent dedication to data-driven insights.

He also an experienced project coordinator that manage projects for multinational channels, orchestrating communication, commercials, presentations, and all product-related activities including proof of concept (POC), demonstrations, and product-specific solution delivery both in SaaS and On Prem model which being performed both on-site, off-site, local, or international. He also experienced in drafting and submitting tender documents as a Head of Presales for projects that requires tendering process.

For the past experiences he also experienced in data engineering and analysis which involving data preparation, data crawling, data processing and data exploration which is essential before the dataset is ready to be further process for analysis and model training. He also worked with team to deliver web applications products, while in another product development he is leading a small team for the development. He also actively joins networking events, conference events and volunteered to become a chairperson for PyCon event and speaker for JSCF 2023.

WORK EXPERIENCES

Solutions Lead / Head of Presales / Data Scientist
Rams Solutions Sdn. Bhd., Malaysia
11 December 2021 – 16 April 2024

Spearheaded end to end e-KYC model for product development from data gathering, data processing, model training, testing webpage, database design and developed API connector for application to call and use the model. Leading projects in hyper-automation solutions which involving another AI model for plant disease identifier, Chatbot, and RPA. Additionally, as a Head of Presales, he also does product demonstration, tendering process, gathering requirement, delivering tailored solutions based on the gathered requirements, and contributed to internal product development

and research initiatives. He also assisting clients in transforming manual, repetitive and tedious process into automated process in digital transformation.

- **Developed AI models**: Implemented e-KYC AI model for Malaysia Identity card and real time data matching, Implemented AI for plant disease identifier. In this project the methodology being used are Scrum. Technologies involved such as Python, Flask, Tensorflow, Computer Vision, Data Processing, MySQL, Alibaba Cloud.
- **Created API connectors**: Facilitated AI Model to have API connector for seamless integration with backend systems. Technologies involved such as Python, Flask, Alibaba Cloud.
- **Containerized APIs**: Utilized Docker to build micro services for the AI model's API for efficient deployment and logging. Technologies involved such as Python, Docker, Gunicorn, uwsgi, Alibaba Cloud.
- **Expanded AI expertise**: Incorporated human 3D face mesh recognition technology to enhance the accuracy of the KYC model. Technologies involved such as Python, Flask, Tensorflow, Computer Vision.
- **Designed database architecture**: Optimized for performance and scalability for AI Model including data collection, garbage collection, and potential model enhancement. Technologies involves such as MySQL.
- **Documentation**: Documenting all AI approaches and the code documentation for references, requirement gathering, and project related documentation. Technologies involved such as Notion, Word, Powerpoint.
- **Data Analysis**: Assisting other departments in producing data analysis or findings from databases which after being visualized in Tableau. Technologies involved such as Tableau, Data Processing, SQL.
- **Architected hyper-automation solutions**: Integrated RPA, chatbots, and in house developed AI for plant disease detection which resulted in sales engagements. Technologies involved such as Python, Flask, Data Processing, Docker, Gunicorn, uwsgi, RPA Tools, Chatbot tools, Filesystems.
- **Successfully presented product demos**: Presenting product demonstration for multiple products in charged including Automation Product, Collaboration Tools Product and HCM Products which resulting in increased product interest and sales engagements. Technologies involved such as Canva, Word, Notion, Spreadsheet.
- **Gathered requirements from users**: Connected with clients or users to gather requirements for their daily processes which to be automated or digitalized and delivered tailored product specific solutions for their digital transformation which reduced the tedious and repetitive activities. Technologies involved such as Word, Powerpoint.
- **Contributed to internal product development**: Developed multiple automation for internal team which involving Intelligent Document Processing and analytical reporting solutions. Developed HR chatbot by integrating OpenAI and in house built chatbot to streamline HR FAQs processes. Technologies involved such as Python, Flask, Data Processing, MySQL, Filesystems, Alibaba Cloud.
- **Managed projects across multiple countries**: He also involved in project coordination for deliverables, where it requires him to communication with the team. Bridging the communication with teams those can be local or

international to have better understanding and closing the gap for miscommunication and ensuring successful project delivery.

- ***Managed communication with principals***: He also involved in communication with the product principals which involving sharing fact findings and insights.
- ***Contributed to research initiatives***: Exploring the brand-new product in the market which to contribute the effectiveness of the workflow such as APIs, Prompts, and other possible integration to reduce the repetitive and tedious activities.
- ***Contributed to market research***: Exploring Gartner and online paper research to know better the trends in the market and what is the best approach which later the result is being shared with the team for better insights.
- ***Networking and maintaining communication***: Attending networking events and gathering healthy leads and maintaining existing leads.

Achievements

- Successfully implemented e-KYC into in-house developed application.
- Successfully delivered Hyper Automation Project to ID Client.
- Successfully implemented RPA Project to ID, MY, TH Clients.
- Successfully assisting and delivering tender documents for MY and ID which resulted in a successful tender.
- Successfully solves known issues by delivering RPA bridge for various legacy and non-legacy system that are not talks with each other.
- Presenting RPA in one of the workshop events at Johor – JSCF 2023 which resulted in multiple active leads for the product.
- Successfully develop and deployed Name card Identifier for internal usage which solves the manual processes.
- Successfully build a Sales Funnel Workflow for MY, TH, ID team which resulted in centralized database for management visibility.
- Successfully understanding and communicating with multinational team with his multilingual capabilities that resulted a better communication channel with MY, ID, TH team.

Data Engineer
BDX Asia Sdn. Bhd., Malaysia
2 July 2019 – 10 December 2021

He with the team successfully performs meticulous data processing tasks, including implementing multiple image pre-processing techniques, data extraction techniques which are also did utilize Google Vision API or Tesseract-OCR, post-processing for the data that's been returned in raw version which being output as clean and structured data. Additionally, he also converted the data into various file formats including xlsx, csv, tsv, filesystem or databases, performed features extraction using OpenCV and Tesseract-OCR. Furthermore, he also played a pivotal role in preparing datasets for modelling, conducting data exploration, and developing base code for Hyper Parameter and Grid Search which being utilized and used within Tensor board for

model checking. He also continuously researching complex modelling techniques to fine-tune the model to have better accuracy and performance.

- **_Prepared images for text extraction_**: Preparing dataset by manual capturing the dataset, classifying and later to do pre-processing and normalization. Technologies involved such as Python, Computer Vision, Data Processing.
- **_Extracted data from images_**: To do image processing using contour techniques which after the desired result met the expectation then to utilize Google Vision API or Tesseract-OCR to do data extraction. Technologies involved such as Python, Computer Vision, Data Processing, Filesystems, MySQL, Flask.
- **_Researched on available tools_**: As some OCR output is too raw and need to do meticulous logic to have the best output of the text, he also did research for various API, costings, and possible integration.
- **_Post-processed text_**: After receiving the raw output, it will need to do cleaning for better output of the text which requires coordinates, merging, and includes NLP to ensure cleanliness and structured data. Technologies involved such as Python, Computer Vision, Data Processing, Filesystems, MySQL.
- **_Converted data into desired format_**: As the output data usually in object or Data Frame format, for further processing it will requires specific output requested which can be files or direct insert into databases. Technologies involved such as Python, Data Processing, Filesystems, MySQL.
- **_Prepared datasets for modelling_**: Conducted data exploration and feature engineering for the dataset including fine tuning biases, down sampling, or up sampling. Technologies involved such as Spreadsheet, Filesystem, Python, Data Processing.
- **_Conducted data modelling using Scikit-Learn and TensorFlow_**: To build DNN or necessary model architecture for data modelling depends on the requirement. Technologies involved such as Python, Tensorflow, Flask, Filesystem, Data Processing.
- **_Developed base code for Hyper Parameter and Grid Search_**: Streamlined team processes to have better and more efficient process in fine tuning the model. Technologies involved such as Python, Tensorflow, Data Processing.
- **_Documentation_**: Documenting all AI approaches and the code documentation for references.

Achievements

- Successfully developed in-house AI to detect key-value identification huge word dataset which requires hours of reading for user to determine the keywords.
- Successfully increase accuracy of the model from 60% to 80% using various methodologies.

Full Stack Engineer
Concorde Tech Sdn. Bhd., Malaysia
16 February 2016 – 01 July 2019

A team player in developing a web application product for reporting. He involved in full stack development which used Java, AngularJS, HTML, CSS, JavaScript and also MSSQL Server as the database. Led the product deliverables to various clients

including setting up and POCs. He also led a Java team of three to develop another web application project which involving requirement gathering, prototyping, and database design. He also assisted Business Analyst to gather requirement for large scale project in one of the modules, which later also deliver prototyping product for approval and continued for development team. Conducted extensive research on online marketing tools and emerging technologies such as Machine Learning, Deep Learning, and Natural Language Processing (NLP) in the Malay language. Others related to this role is, he also utilized a wide array of technologies including PHP, Bootstrap, HTML, CSS, JavaScript, jQuery, LeafletJS, AngularJS, Java, MSSQL Server, and Apache SOLR, I developed models for Malay NLP and sentiment analysis, integrated OCR technologies using OpenCV and Tesseract-OCR, and managed server installations, configurations, migrations, and data transfers. Additionally, I played a key role in gathering user requirements for Proof of Concept (POC) and Proof of Value (POV), delivering innovative products to clients.

- **Full-stack Development**: A team player to develop and deliver product. Managing source code and deployment into Azure cloud. Exposed to SCRUM and Agile type of Development. Technologies involved such as Java (backend components), MSSQL (database), HTML, CSS, Javascript, jQuery, AngularJS (frontend components), Azure Cloud VM, Apache SOLR.
- **System Architecture**: Assisting Business Analysts to gather technical requirements and produced working prototypes. Technologies involved such as Spreadsheet, Word, Visio.
- **Prototyping**: During this time, he is exposed to UI/UX team development which concurrently doing both UI/UX and prototyping.
- **Web Application Development**: Led a team of three to develop a web application product. Technologies utilized such as Backend components, Frontend components, MySQL (database)
- **Research**: Involved in research on Machine Learning, Deep Learning, Data Processing, and Computer Vision such as OpenCV and Tesseract-OCR. Researched and studied online marketing tools such as Adobe Campaign and Salesforce for targeted marketing.
- **NLP AI Development**: Assists in development of NLP AI Project which involves Malay Language which dataset is retrieved from Kamus Dewan Malaysia using Spacy and sentiment analysis using RNN(LSTM). Technologies involved such as Python, Data Processing, Tensorflow, Spacy.
- **Data Scraping**: Conducted web-scraping for data gathering from various online sources. Technologies involved such as Python, Data Processing, Filesystems.
- **Image Processing Development**: Explored OCR technologies such as OpenCV and Pillow to do text extraction using Tesseract-OCR.
- **Project Maintenance**: Maintaining web application product built.
- **Web Development**: Utilizing Java, Apache SOLR, HTML, CSS, JavaScript, jQuery, LeafletJS, AngularJS, Bootstrap, MSSQL Server, and other technologies for development.
- **Visualization Development**: Develop custom state of the art for visualization, dashboards, analysis, and summarized information from dataset. Technologies utilized such as Backend components, Frontend Components, D3JS (visualization components)

- **Data Analysis**: Exploring datasets from various sources to do analysis with the dataset and produce findings in reports or dashboards. Technologies utilized such as Python, Data Processing, R, Power BI.
- **API Integrations for Development**: Google API, Twitter API, Git, Jira, and deployed environments for Proof of Concept (POC) and Proof of Value (POV).
- **Database Design**: Design database architecture for development. Databases involved such as MySQL, MSSQL, MariaDB.
- **Implementation**: Implementing web application into WAN environment. Integrating with Cloudera cluster.
- **Documentation**: Documenting all AI approaches and the code documentation for references.
- **Others**: Using Git repositories, Trello, Jira, and Jenkins for source control, tickets, and testing. Managed server installations, configurations, migrations, and data transfers.

Achievements

- Successfully delivered in-house reporting application.
- Successfully delivered analytics and reporting web application to various clients.
- Successfully gathered requirements, assisting and delivering Prototype for System Architecture.

EDUCATION

Bachelor of Computer Science
University of Bina Nusantara, West Jakarta, Indonesia
2012 – 2015

Skills

Technical Skills

- Programming Languages: Python, Java, PHP, HTML, CSS, JavaScript
- Frameworks/Libraries: TensorFlow, Scikit-Learn, Pandas, OpenCV, Spacy, AngularJS, Bootstrap
- Database Management: MySQL, MSSQL Server, Apache SOLR
- Machine Learning/Deep Learning: TensorFlow, Scikit-Learn, DNN, RNN(LSTM), CNN, NLP
- Web Development: Django, Flask, AngularJS, Bootstrap, LeafletJS, D3JS
- API Integration: Google API, Twitter API, Snov API, Lark API, OpenAI API
- Version Control: Git
- Project Management Tools: Jira, Trello, YouTrack
- Data Visualization: D3JS, LeafletJS
- Workflow Management: Apache Airflow
- Reporting Tools: Tableau, Power BI
- OCR Technologies: OpenCV, Tesseract-OCR, Google Vision, IDP
- Cloud: Azure, Alibaba

- Operating System: Windows, Linux, Redhat, Pi
- Others: Jenkins, Redmine, Cloudera, Figma, Canva, Appcelerator, Photoshop, Spreadsheet, Brevo, Snov, GPTs, CapCut, Docker

Soft Skills

- Team Leadership: Led small and multicultural teams in development projects.
- Communication: Effectively communicated with team members, clients, and stakeholders
- Problem-Solving: Analyzed and solved complex technical issues
- Adaptability: Easily adapted to new technologies and project requirements
- Collaboration: Worked collaboratively with cross-functional teams to achieve project goals
- Time Management: Managed multiple tasks and priorities efficiently
- Creativity: Developed innovative solutions to overcome challenges
- Attention to Detail: Ensured accuracy and precision in all aspects of development and project management.

Language Skills

Language	Verbal Communication	Written Communication
English	Professional	Professional
Chinese – Mandarin	Working Proficiency	Conversational
Malay	Working Proficiency	Conversational
Indonesian	Professional	Professional

CERTIFICATION

- Course Diploma – Automation Commander
  Credential ID: 62e8db4206b3fb185461faf3
- Course Diploma – Automation Worker
  Credential ID: 632bd2da1df8235731211688
- RPA Developer
  Credential ID: CB5102130220230001