NIC NGOO

BASIC INFORMATION

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SUMMARY

- Hands-on serial technology builder proven to deliver impact in various domains: Banking, FinTech, Payments, Big Data, Digital Transformation, FuelTech, Supply Chain & Logistics, Cloud Computing, Robotics, Datacenter and Network Infrastructure
- 14 years of progressive experience strategizing and executing technical strategies adopting the latest technological trends and open-sourced frameworks in AI/ML, Customer360, Cloud Computing, Big Data, Distributed Systems and IoT
- Track record designing and building high performing technology organizations with Budget/P&L up to USD100Mil and from 10 to 250 members globally consisting of software development, automation QA, data engineering, AI engineering, cyber security and site reliability engineering (SRE)
- Oversaw the technical governance and cyber security functions of 3 startups on hypergrowth to comply with Bank Negara Malaysia RMiT, SOC2 and PCI-DSS requirements
- Effective communicator across all levels from C-suite to player-coaching highly technical team members, for delivery of enterprise-scale digital transformation initiatives

CORE COMPETENCIES

- Executive leadership driving digital transformation and cloud migrations
- Agile Development Lifecycle (Shift-left, DevOps, GitOps, FinOps, DataOps)
- Big data engineering for analytics and machine learning
- Build-buy analysis of PaaS and SaaS platforms
- Cloud computing technologies (AWS, GCP, AliCloud) Digital payments infrastructure
- Waterfall and Agile Project Management Methodologies
- Vendor analysis, selection, negotiation and procurement
- Building and developing top technical talents

TECHNICAL SKILLS

- Cloud technologies: Amazon Web Services (AWS), Google Cloud Platform (GCP), Microsoft Azure, AliCloud
- DevSecOps, FinOps and Argo CI/CD
- Containerization and Orchestration: Docker and Kubernetes
- Web Technologies: ReactJS, Javascript, HTML, CSS
- Server Technologies: Kafka, REST API, JSON, NodeJS
- Data Analytics: Python, Sisense, Jupyter
- Observability: New Relic, Datadog, Elasticsearch
- Database Technologies: MongoDB, MySQL, PostgreSQL, DocumentDB

- Agile Product Lifecycle Management
- Operation Systems: Windows, Linux and Unix
- IBM Websphere MQ, RabbitMQ IBM BladeCenter Servers

WORK EXPERIENCE

SVP, Head of Engineering
July 2023 - current

Ambank (M) Berhad

- Head of technology for the newly formed Group Fintech Innovation Centre within the bank
- Played the role of strategic technology advisor to Group CEO and C-suites on the next 5-year technology roadmap for the bank
- Building a starter engineering team to execute embedded finance product for the bank that will deliver an MVP to the market through ecosystem partners
- Developed the Fintech Accelerator business plan, governance model, organization structure and tech stack
- Established new cloud practice in an on-prem only bank from strategic direction, migration roadmap, operations model and risk controls

SVP Engineering
July 2022 - June 2023

MoneyLion Inc, New York and Kuala Lumpur

- MoneyLion is a Fintech superapp for the everyday hardworking American. Headquartered in New York City, USA, the 300-strong technology hub is based in Kuala Lumpur, Malaysia
- Global SVP of Engineering overseeing 5 organizations, across USA and Malaysia with 190 employees across Product Engineering, Data Engineering, Cyber Security, AI Engineering and Site Reliability Engineering
- Achieved 35% reduction in technology operating cost within 6 months of joining
- Performed corporate restructuring that saved the company $1MM in people cost annually
- Established engineering strategy and vision to align 20+ distributed engineering teams globally that focused on engineering excellence, shift-left quality and security and observability practice
- Pushed architectural modernization through platform teams that resulted in improved domain ownership and reduced P1 incidents
- Chaired monthly Technology Steering Committee meeting that set organizational technology direction and strategic decisions
- Drove the ownership and high performance bar across engineering org, starting with feedback loop/metrics driven engineering culture and shifting left where quality and security is everyone's job
- Lead OKR planning across 5 organizations that aligned to company strategic direction
- Lead technology organization design and headcount planning

Chief Technology Officer & Head of Engineering
July 2019 - June 2022

Setel Ventures Sdn. Bhd. (a Petronas Dagangan Berhad Subsidiary), Kuala Lumpur, Malaysia

- CTO at Setel, a Petronas Dagangan Berhad (retail) corporate venture delivering next-gen motorists experience in Malaysia
- Entrusted with tech portfolio of over MYR 100 Million / year across B2C and B2B initiatives
- Oversaw the tech-team build of 3 internal startups: Setel Motorist Superapp, new PDB logistics venture, PetronasShop-eCommerce and DigitalBank initiative
- Head a 120-strong local engineering team reporting to the CEO
- Designed the org structure and scaled the KL Engineering team from 10 to 150 engineers in 3 years and scaled up remote teams in Ukraine and Vietnam to 150+
- Responsible for Setel's Technological vision, data, security, roadmap, scalability and reliability
- Reports Setel's performance to PDB Board Members, consisting of CEO of Petronas Downstream, Group CDIO and CEO of PDB
- Instituted a performance-driven engineering culture that resulted in backend services scaling to 10x of performance
- Led the architectural decisions of Setel's Kubernetes backend that scaled from 6 services to over 100

microservices
- Technical focal for Setel's integration with 3rd party financial institutions and partners
- Led technical stream in obtaining Setel's approval from Bank Negara Malaysia eMoney license
- Built a Platform Engineering team that focused on performance, paying technical debts, evangelising engineering best practice and bringing ideas to proof-of-concepts
- Implemented end to end application performance and infrastructure monitoring to meet 99.96% uptime
- Implemented automated CI/CD incorporating automated regression testing and load testing frameworkReviewed and reduced overall Tech spending by 15% within first 2 months

VP, Technology   January 2019 - June 2019
Kaodim Sdn Bhd, Selangor, Malaysia
- Head the Technology team of Kaodim consisting of 20 Engineers reporting to CEO
- Built 360-degree performance management system and job growth framework
- Drove Docker-based CI/CD pipeline to achieve immutable and blue/green deployment
- Evangelized engineering practice through Tech blog, Medium publication and open-source Git projects
- Implemented end to end application and infrastructure monitoring to meet 99.96% uptime
- Initiated automated regression testing and load testing framework
- Reviewed and reduced overall Tech spending by 15% within first 2 months.
- Migrated critical production workload to AWS

SAVP, Engineering Manager - Payments   February 2018 - December 2018
Measat Broadcast Network Systems (Astro), Kuala Lumpur, Malaysia
- Lead the engineering team for Astro's Payments business consisting of Payment Gateway(APG) and Payfy (eWallet) services that handles RM20M monthly
- Internalized the software engineering team to 10 engineers in addition to managing 20 vendor software engineers
- Internalized source code and processes of Payment Gateway and eWallet product from off-shore vendor to in-house engineering team
- Increased release velocity of Payments from 4 to 12 stories per sprint on average through scrum methodology
- Introduced coding best practices to vendor and internal teams incorporating unit testing, branching strategy, peer review, pull request, automated functional and integration testing framework, load testing, and chaos engineering
- Established operational practice within engineering team to meet business SLAs
- Led both payments services in adopting DevOps and Cloud architecture best practices through Astro's first Cloud Center of Excellence (CCoE)
- Partner with Business VP, Product Owner and Astro leadership team to strategize roadmap for both APG and Payfy
- Drove the migration of 8 partners from On-prem datacenter to APG on AWS in 6 months

Sr. Technical Delivery Manager & Engagement Manager   June 2016 - February 2018
Amazon Web Services, New York, NY, USA
- Tracks opportunities and ensures successful delivery by providing program management, reporting, resource coordination, and communication across multiple customer and AWS teams
- Lead quarterly executive briefings (EBCs) and effectively deliver information at the customer C-suite/VP levels
- Manage feature requests, and identify business impact for 13 customer business units by working across BD and Service Teams
- Traverse the vast AWS product families as a first responder in triaging and driving resolution to customer technical challenges
- Identified inefficiencies and streamline billing and accounting processes to cut down creation time of new accounts by 30%
- Evangelize and influence customers adoption of AWS IoT, Containers, Machine Learning, Big Data and Serverless services

Program Manager   February 2014 - May 2016

Amazon Robotics, Boston, MA, USA

- Deployment Engineering Program Manager responsible for launching Amazon Robotics mobile automation systems in next-generation Amazon Fulfillment Centers across North America
- Launched a half million sq. ft. fulfillment center in 3 months (on schedule) and 35% under $50m budget by employing efficient resource management and high quality standards to reduce defects
- Managed a team of 5 Deployment Engineers responsible for leading day-to-day operations, tracking vendor deliverables and technical configuration and troubleshooting
- Directed Software Engineers, Support Technicians and Product Managers through testing and deployment phases to migrate warehouse management system for two clients that resulted in on-time, seamless and defect-free migrations
- Demonstrated ability to obtain the support of leaders at all levels in the organization including the CTO, VP of Engineering, Director of Software Development, Functional Managers and Team Leads to strategically commit resources to meet project objectives

Senior Professional Services Engineer   April 2013 - January 2014

Amazon Robotics, Boston, MA, USA

- Lead Engineer in cross-functional implementation of game-changing warehouse automation system for Fortune 500 retailers, e-commerce and medical industry companies involving more than 75% of traveling

Professional Services Engineer   January 2011 - March 2013

Amazon Robotics, Boston, MA, USA

- Led hardware and software deployments of the Kiva Mobile Fulfillment Solution across 5 customer fulfillment centers across North America and Canada. Responsible for technical configuration, integration and testing efforts to exceed customers' business and functional requirements that resulted in 5 successful software releases and implementations

Mechanical Engineer   June 2010 - November 2010

CAMotion Inc, Atlanta, GA, USA

CERTIFICATIONS & AWARDS

- Certified Scrum Master (CSM)
- AWS Solutions Architect - Associate
- AWS SysOps Administrator - Associate
- AWS Developer - Associate
- Scaled Agile Framework (SAFe) 4.0 Agilist
- Project Management Professional (PMP), PMI
- Practical Project Management Certificate University of Massachusetts, Boston
- 2008 Richard K. Whitehead Jr. Memorial Award for outstanding senior
- Malaysian Public Service Department (JPA) Scholar

EDUCATION

Master of Science in Mechanical Engineering   August 2008 - December 2009

Georgia Institute of Technology, Atlanta GA, USA

• GPA: 3.80/4.00

• Thesis title: Admittance and Impedance Haptic Control for Realization of Digital Clay as an Effective Human Machine Interface Device

Bachelor of Science in Mechanical Engineering   August 2004 - May 2008

Georgia Institute of Technology, Atlanta GA, USA

• GPA: 3.83/4.00

• Award: 2008 Richard K. Whitehead Jr. Memorial Award for outstanding senior

Practical Project Management   January 2013 - April 2013
University of Massachusetts at Boston, Boston MA, USA

PUBLICATIONS

- How we monitor the health of our applications and infrastructure https://medium.com/kaodim-engineering/monitoring-app-infra-64768c79ab37
- Ngoo, C. S., Book, W. J., DIGITAL CLAY FORCE OBSERVER DESIGN AND SHAPE EDITING CONCEPT, Proceedings of the ASME 2009 Dynamic Systems and Control Conference, October 12-14, 2009, Hollywood, California, USA
- Winck, R. C., Marek, K., Ngoo, C. S., ACTIVE ANTI-LOCK BRAKE SYSTEM FOR CABLE-TYPE BRAKES ON LOW POWERED VEHICLES, SAE 2010 World Congress & Exhibition, April 13-15, 2010, Michigan, USA

REFERENCES

References available upon request.