Nigel Tan Jin Chun

Resume

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SUMMARY

As a postgraduate data science student and a recent graduate of Electrical and Computer System Engineering at Monash University, I have a deep interest in creating impactful software and hardware solutions. My curiosity extends beyond my main discipline, making me a well-rounded team player. I look forward to applying my skills and perspectives to contribute meaningfully to your team while fully realizing my potential.

EDUCATION

Monash University   *Mar. 2025 – Dec. 2026*

Master of Data Science

Monash University Malaysia   *Nov. 2020 – Dec. 2024*

Bachelor of Electrical and Computer System Engineering (Honours)

Advanced Semiconductor Academy of Malaysia   *Nov. 2024 – Mar. 2025*

IC Design Workshop and National Semiconductor Excellence Program (NSEP)

Sunway College   *Mar. 2019 – Aug. 2020*

Cambridge GCE A-Levels – Grade: 4A* (Mathematics, Physics, Chemistry, Economics)

EXPERIENCE

StarFive Technologies International Sdn. Bhd   *Jun. 2025 - Present*

Physical Design Engineer Partition Lead   *Kuala Lumpur, Malaysia*

- Led a team in automating place-and-route flows using Cadence Innovus for RISC-V SoC designs.
- Optimized floorplanning, placement and routing to meet performance, power and area targets.
- Coordinated design verification and timing closure to ensure successful tape-out.

Force of Nature   *Jun. 2025 – Jul. 2025*

Lead Consultant   *London, United Kingdom*

- Led a 7 member consulting team to identify youth climate skill gaps and design three new training pathways.
- Designed delivery models and partnership strategies to optimise program reach and effectiveness.
- Delivered a strategic proposal with impact measurement frameworks and scalable partnership models.

The Malaysian SOCIAL Project – IDEAS Autism Centre   *Apr. 2025 – Jun. 2025*

Lead Consultant   *Kuala Lumpur, Malaysia*

- Led a 5 member consulting team in developing an impact measurement and reporting toolkit for a national autism center.
- Conducted stakeholder interviews and data workflow analysis to create SOPs and scalable reporting templates.
- Collaborated with a Kearney mentor to refine consulting methodologies and successfully delivered a finalized toolkit.

SLN Sustainability Ltd   *Jun. 2024 – July. 2024*

Lead Consultant   *Coventry, United Kingdom*

- Lead a 6 member consulting team in developing omnichannel marketing strategy for a sustainable children's water bottle.
- Engaged with external stakeholders for insights and feedback, aligning strategies with real-world needs.
- Applied technical and analytical skills in software development and data management to optimize content creation.

Keysight Technologies   *Nov. 2023 – Feb. 2024*

R&D Firmware Engineer Intern   *Penang, Malaysia*

- Led the upgrade of CLLC converter control systems, achieving efficient voltage conversion by migrating code to a newer MCU.
- Played a pivotal role in the development and IEC61010 standard compliance testing of a new DAQ card, enhancing safety.
- Standardized the calibration process for an Arbitrary Waveform Generator through detailed documentation.

TECHNICAL SKILLS

Scripting Languages: Python, MATLAB, C, C++, C#, Verilog, SystemVerilog, Assembly, HTML, CSS, JavaScript
Tools: Design Compiler, PrimeTime, ModelSim, Quartus, VCS, ICC2, PSoC, FPGA, PSS/E, LTSpice, Git, TCL, Zsh, Bash, Linux
Development Tools: Jira, Confluence, BitBucket, BlackDuck, Scrum Development, Agile Development
Soft Skills: Leadership & Interpersonal Communication, Adaptability & Versatility, Problem Solving & Critical Thinking
Human Languages: English, Mandarin, Malay

PROJECTS

Integrated Circuit Physical Design Project | Outstanding Achievement in Design Project *Dec. 2024*
- Led a team of 5 individuals to design and optimize integrated circuits, overseeing synthesis, implementation and timing analysis.
- Achieved timing closure, zero design violations and enhanced quality of results.

Simulation of On-Load Tap Changer Transformer (FYP) | First Runner-Up Video Competition *Oct. 2024*
- Designed and validated a real-time simulation model for On-Load Tap Changer transformers using Typhoon HIL software, achieving first runner-up in the Video Competition.
- Currently under review by Q1 Journal (Sustainable Energy, Grids and Networks).

State Estimation for Voltage Control in Renewable Energy Distribution Networks *Oct. 2024*
- Analyzed traditional and AI-driven state estimation methods, highlighting advancements in machine learning, deep learning, and hybrid approaches.
- Currently under review by Q1 Journal (Renewable and Sustainable Energy Reviews).

Puck Picking Autonomous Robot *Dec. 2023*
- Led a cross-functional team of 4 individuals in the design, construction and programming of a self-sufficient robot for autonomous transportation of colored pucks and bowling pin retrieval, ensuring seamless integration of advanced localization and navigation systems.

Hybrid Solar Lighting System | Nominee of James Dyson Award and Springwise Article Feature *Jun. 2021*
- Directed a 5-member team to pioneer a solar hybrid lighting system utilizing the innovative Kanawa-Tsugi concept.
- Earned a nomination for the James Dyson Award 2021 and a feature in Springwise Article.

PROFESSIONAL CERTIFICATION

- Embedded Software Development with C
- Chip based VLSI Design for Industrial Application
- CertNexus Certified Ethical Emerging Technologist
- Software Product Management
- Cadence Analog IC Design Implementation and Verification
- Cadence Digital Design and Signoff Academic Curriculum
- Cadence Digital Design and Verification Academic Curriculum
- MATLAB and Simulink Onramp
- Arm Cortex-M Architecture and Software Development
- Semiconductor Packaging – Arizona State University
- Materials Science for Advanced Technological Applications
- DevOps Mastery – KodeKloud
- IBM Machine Learning
- AWS Cloud Solutions Architect
- Materials Science for Technological Applications
- Intel AI Fundamentals

ACHIEVEMENTS

- Champion of Imagine 2025
- Outstanding Achievement in Design Project 2024
- Cadence Student Ambassador
- Nominee for James Dyson Award
- Education Excellence Award
- Monash High Achiever Award
- Monash Leap Into Leadership Champion
- ASEAN AYO Northeast Asia & India Competition
- Huawei Sales Elite Challenge Finalist
- King's Scout (Pengakap Raja)
- National Leader Scout Award
- Jeffrey Cheah Special Scholarship

PROFESSIONAL AFFILIATION

- Member, Project Management Institute
- Member, International Association of Engineers
- Graduate Member, Australian Computer Society
- Graduate Engineer, Engineers Australia
- Graduate Engineer, Board of Engineers Malaysia
- Member, National Society of Professional Engineers
- Graduate Member, Institution of Engineers Malaysia
- Graduate Technologist, Malaysian Board of Technologists
- Member, Association of Computing Machinery
- Graduate Member, The Chartered Institute for IT

EXTRACURRICULAR ACTIVITIES

- Axiata Digital Leaders Program Cohort 2
- University of Cologne Summer School Ambassador
- FXB Climate Advocate Summer Program
- Deloitte x Monash Volunteer
- Monash Investment Analyst Program
- Monash Alumni Mentor
- NCGS Volunteer
- Sunway XFarms Senior Apprentice
- Gibbon Conservation Society Campaign Lead
- University of Turku Summer School Participant
- McKinsey Forward Learners Program
- Deloitte AdvantEDGE Program
- Tunku Abdul Rahman Foundation Mentor
- Aspire Leaders Program Cohort 3
- Climate Catalysts Mentorship Program
- GrassRootsWeb Volunteer