

NIGEL SEBESTIAAN VAN DER HORST

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EDUCATION

National University of Singapore **Aug 2022 - Present**
Bachelor of Engineering (Honours) - Electrical Engineering with a Minor in Computing

- GPA: 4.03/5.0
- Expected Date of Graduation: Dec 2025
- Introduction to Programming methodology (python), Microcontroller Programming and Interfacing, Computer networks

Singapore Polytechnic **Apr 2017 - May 2020**
Diploma in Computer Engineering

- GPA: 3.64/4.0
- (Director's Honour Roll 2019/2020)
- Computing Networking, Server Management, Network Security, Cyber Security

WORK EXPERIENCE

Operation Automation Intern, Shopee Regional SPX **Jan 2025 - Apr 2025**

- Design and deploy Netdata for network monitoring across 4 sorting centres, reducing investigation downtime by 30%
- Leveraged AWS Lambda and DynamoDB to automate 7 critical alert integrations into native Seataalk app, reducing manual intervention and incident response time by 20%
- Integrated network metrics into in-house SCADA systems, enabling correlation of OT/IT issues

Systems Engineer Intern, CySecure Pte Ltd **Jun 2024 - Aug 2024**

- Spearheaded development of an MVP risk analysis platform for non-technical personnel, allowing cost analysis for remediating risks identified

Network Engineering Intern, Terra Systems **May 2019 - Oct 2019**

- Trouble shot network issues for 10+ clients, maintaining 99.99% SLA compliance
- Deployed 2 call centres using Cisco UCM/UCCX and hardened security via firewall policies

POSITIONS OF RESPONSIBILITY

College of Design and Engineering (CDE) Club, Content Director **Sep 2022 - Sep 2023**

- Oversaw building and bolstering CDE brand identity as a new faculty of NUS for over 2,000 students
- Led a team of 5 to create publicity, growing social media platforms leading to a 65% boost in followers

ACADEMIC PROJECTS

Embedded Systems Developer, STM32 Microcontroller Project **Sep 2023 - Nov 2023**

- Developed a multi-mode embedded system in C on STM32L475 using HAL libraries, interfacing 6 sensors via I2C, UART and GPIO
- Implemented IRQ interrupt handling, real-time telemetry using LCD feedback with custom bitmap graphics

ADDITIONAL INFORMATION

- **Languages:** English – Native proficiency, Chinese - intermediate working proficiency
- **Programming:** Python, Assembly, C
- **Cisco:** Networking, Cyber Security, Collaboration
- **System admin:** MySQL, Microsoft Windows Server Management, Linux Servers
- **Cloud/DevOps:** AWS Lambda, DynamoDB, Linux, Netdata