# RYAN KWOK

# ACADEMIC QUALIFICATIONS

National University of Singapore (Aug 20 – Jul 24)

- (Hons.) Degree in Information Security
- University Scholars
  Programme
- Minor in Philosophy

### Smart Nation Scholarship (2019)

 4 year bond with Cyber Security Agency of Singapore (CSA)

#### **TECHNICAL SKILLS**

- CompTIA Security+
- EC Council Certified Ethical Hacker
- EC Council Computer Hacking and Forensics Investigator
- Google Cloud
  Associate Cloud
  Engineer
- Coding Literacy in Python, C, C++, and Java
- Experience in React Framework, Docker, Virtual Machines, RaspberryPi

#### **COURSES TAKEN**

- Certified Blockchain Specialist
- Certified IoT
  Specialist
- Certified Machine Learning Specialist
- Deep Learning with TensorFlow and Python

## **WORK EXPERIENCE**

#### Cyber Security Developer, Amaris.Al

- Streamlined and refined the interface of systems dealing with adversarial AI
- Evaluated and demonstrated deepfake generation technologies to EXCO
- Integrated deepfake detection components to upgrade detection systems
- Spearheaded the investigation, assessment, and testing of audio transcription and verification technologies to upgrade the Hospitality System.
- Reviewed and standardised technical documentation of all systems assigned

#### Intern, Strategy, CSA

May 21 - Jul 21

May 22 - Aug 22

- Advised superiors on current international and local regulations in cybersecurity of AI, cloud, and telecommunications
- Forecasted possible regulations on the cybersecurity of future technologies such as human augmentation, space technology, and quantum computing
- Qualified regulatory direction recommendations for Singapore by proposing specific actions and cybersecurity policies in each cybersecurity field

#### **Teaching Assistant, National University of Singapore**

Jan 21 - Nov 22

- CS1010X Programming Methodology (Python)
- CS2113 Software Engineering & Object-Oriented Programming (Java)
  - IS1108 Digital Ethics and Data Privacy

#### Intern, Cyber Security Programme Centre, CSA

Feb 20 – Jul 20

- Yielded security insights through penetration tests and vulnerability assessments
- Accelerated onboarding processes via Python automation
- Advised superiors on recommendations based on evaluations and analyses of cybersecurity solutions. Fields of interest include Cloud Security, Zero Trust Security in the Cloud, Cloud Key Management Services, and Threats in Facial Recognition Software

#### **PERSONAL PROJECTS**

#### **Chilling Sessions**

**NUS Residential Life Article** 

- Orchestrated and directed a ground-up initiative focused on reminding University
  Scholars Programme students to relax and focus on mental health
- Awarded a special \$1000 welfare fund by NUS Office of Student Affairs and was showcased in their article

#### A Safe Space

FAQ | Telegram Bot

- Founded a Telegram bot that simulates an anonymous group chat
- Envisioned to be a platform for University Scholars Programme students to hold anonymous conversations on mental health issues

#### **USP Queue Bot**

**Documentation | Telegram Bot** 

- Initiated and engineered a queue system for USP events on Telegram
- Consolidated platform for users that expedites and simplifies admin control
- Maximised user friendliness with automatic notifications for users

#### **Build On, Singapore 2020 Hackathon**

**Certificate** | **Product Pitch** 

- Semi-finalist position in this hackathon implementing Amazon Web Services solutions
- Designed and developed a "Reliability Bot" Telegram bot that determines how reliable a piece of text is, and returns a recommendation with an educational factor
- Oversaw the implementation of AWS Comprehend for language processing and sentiment analysis