GUCON Nailah Ginylle Pabilonia

HP: +6598359848 | Email: nailahgucon@gmail.com

Linkedin: www.linkedin.com/in/nailahgucon | Website: https://nailahgucon.github.io | GitHub: https://github.com/nailahgucon

PERSONAL INFORMATION

Citizenship: Singapore Permanent Resident

EDUCATION

Nanyang Technological University, Singapore
Aug 2020 – Dec 2023

Bachelor of Engineering (Computer Science)

Specialisation: Data Science & Analytics and Artificial Intelligence

- Recipient of the ASEAN Undergraduate Scholarship
- Relevant Modules: Data Structures & Algorithms, Algorithm Design & Analysis, Object Oriented Design & Programming, Software Engineering, Artificial Intelligence, Intelligent Agents, Database System Principles, Information Retrieval, Neural Network & Deep Learning, Natural Language Processing

Nanyang Polytechnic, Singapore
Apr 2017 – Mar 2020

Diploma in Multimedia and Infocomm Technology

Specialization: Infocomm Solutions

- Diploma with Merit, CGPA: 3.94/4.00
- Recipient of the Choo Lim Scholarship
- Recipient of Cisco Systems (USA) Outstanding Project Work (Special Graduation Award)
- Top Student Award for 1 semester
- Directors' List for all 6 semesters

ACADEMIC PROJECTS

Nanyang Technological University, Singapore

Data Science Project
Mar 2021 - Apr 2021

Title: TMDB Genre Prediction Mini Project

- Engaged in a collaborative effort within a team of three to create and evaluate diverse prediction models for movie genres using movie overviews
- Conducted data acquisition, cleaning, and visualization to identify factors that improve the accuracy of the model.
- Implemented a multi-label classification model using Natural Language Processing (NLP) to cater to movies that span multiple genres

Software Engineering Project
Sep 2021 – Oct 2021

Title: Outhink Itinerary Planner

- Spearheaded a team of 5 to develop an Android mobile application featuring diverse Singapore tourist attractions for users' perusal and assist them in planning a one-day itinerary plan while ensuring on-time delivery of lab deliverables that's in-line with the module requirements; Achieved an A for the module
- Documented the Software Requirements Specification Document; Programmed the Itinerary page that generates a one-day itinerary plan for the user based on their pre-determined tourist attractions selection and time frame given

Neural Networks and Deep Learning Project
Oct 2023 - Nov 2023

Title: RunLah PyGame Application and RunLahAI Game Bot

- Designed and implemented a custom endless runner game with Python and PyGame
- Developed and trained an EfficientNetV2-S-based AI game bot for the endless runner game, managing the entire process from data preparation to optimization with diverse batch sizes and epochs for superior model performance

Final Year Project
Jan 2023 - Present

Title: 3D Human Reconstruction

- Conducted in-depth research, training and evaluation of the Pixel-Aligned Implicit Function (PIFu) model
- Developed a novel 3D hand reconstruction workflow (3DHRW) leveraging the HandOccNet model
- Built a mesh merging application that streamlines the alignment of the PIFu full-body mesh and 3DHRW hand meshes with a single user-defined parameter, yielding a full-body mesh with more intricate hand representation
- Developed an automated character rigging workflow showcasing a practical utilisation of PIFu, YOLOv5, and RigNet to significantly expedite the base creation of 3D rigged characters and democratising access to the whole process for people with diverse skill levels; Translated the workflow's output into a simple Unreal Engine use case, underscoring its capabilities in a real-world application

PERSONAL PROJECTS

NUS IDEATE 2021 Competition
Jul 2021 - Aug 2021

Title: StackLah! Mobile Application Prototype

- Lead and performed requirement analysis of business problem and developed a mobile application prototype using Framer which utilizes Near-Field Communication for rental carts in supermarkets to reduce the use of plastic bags

Samsung Solve For Tomorrow Competition
Nov 2022 – May 2023

Title: Plativity Mobile Application Prototype

- Team Leader of Finalist Team (Top 5 of University Category)
- Developed a gamified productivity mobile app prototype using Figma that combines to-do lists with a collectible card game, with task prioritization automation, and customizable virtual productivity buddies.

WORK EXPERIENCE

Central Provident Fund Board (CPFB)
May 2022 – Dec 2022

RPA Team in Business Incubator & Accelerator Department, RPA/IPA Intern

- Developed Python scripts for data migration, reducing manual data entry time for CPFB Service Center Officers.
- Created data visualization charts and tables in Excel for COVID-19 tracking in a CPFB use case.
- Collaborated with another intern to develop a booking system app for a CPFB Use Case using Power Apps and Power Automate. Designed and implemented features that prevent scheduling conflicts, enable staff nomination, and allow for recurring bookings. Developed statistics pages to visualize app usage and staff productivity.
- Assisted with UIPath trainings by addressing trainees' technical issues and clarifying doubts.
- Designed promotional materials, including posters, items, and PowerPoint slides using Canva, for company visits and product showcasing.

Klass Engineering and Solutions Pte Ltd
Aug 2019 – Sep 2019

Product Creation Team for Edge Analytics, Software Engineer

- Elevated the capabilities of a web-based configuration utility during my internship by integrating ReactJS, introducing an additional functionality to improving the overall user experience.
- Created development and user guides for the web-based configuration utility using Markdown.

Klass Engineering and Solutions Pte Ltd
Mar 2019 – Aug 2019

Product Creation Team for Edge Analytics, Software Engineer Intern

- Independently developed a web-based configuration utility using Django, Python, and SQLite (complemented by HTML5, CSS3, and JavaScript) to aid in the configuration of an application on NVIDIA's Jetson TX2, giving authorized users an easy platform to manipulate device configurations and view important device details.
- Trained and tested an object detection dataset using Darknet to improve the accuracy of the YoloV2 model.
- Designed promotional items for the company's attendance at career fairs using Adobe Illustrator and GIMP.

CO-CURRICULAR ACTIVITIES

Nanyang Technological University Open Source Society
Aug 2020 – Present

Member

- Actively participated in events to learn more about different open source technologies and career opportunities

Nanyang Polytechnic's Community Service Club
Apr 2019 – Apr 2020

Executive Committee Member

- Organized and executed outreach events for special needs, children & the elderly
- Active role in designing the promotional posters for the club's outreach events

Nanyang Polytechnic's School of Engineering Student Advocacy Club
Apr 2019 – Apr 2020

Logistics Head of Executive Committee

- Handled logistics and finances of club's freshman induction camp
- Involved in the execution of inter-school and outreach events for secondary schools

SKILLS

Languages: Proficient in English

Programming: Python, SQL, HTML, CSS, JavaScript**,** Power Platform (Power Apps, Power Automate), Java, Node.js, C, UIPath, Tableau, ReactJS

Certification: Google Data Analytics, Google UX Design, Google Project Management

Software Applications & Frameworks: Adobe Illustrator, Adobe Premiere Pro, Microsoft Excel