

EXPERIENCE

- **Apple Developer Academy at Universitas Ciputra** Surabaya, Indonesia
February 2025–December 2025
Software Developer Intern
 - **Soon:** “Soon” is a narrative-driven is a 2D pixel game built using Unity, where you will guide the main character, Willow, through her emotional journey of aging. I wrote the kinematic character controller for this game from scratch.
 - **BookIt:** “BookIt” is an app tailor made for the employees of Ciputra Hospital Surabaya to reserve meeting rooms and company drivers, which are highly limited in numbers. The app’s driver booking feature utilizes a carpool system, where a smart algorithm decides how an employee can be fit into an existing booking based on multiple metrics.
 - **TopsyBunny:** “TopsyBunny” is a 3D multiplayer game built using Apple’s RealityKit and GameKit framework where you play as drunken bunnies and compete in throwing wine bottles at each other. I was the tech lead for this project.
 - **BirdBox:** “BirdBox” is a 3D co-op augmented reality (AR) game built using Apple’s ARKit framework where each player attempts to best the other in a chicken fight.
 - **English Club:** Established a club to help other learners in the academy on their English speaking skills. This includes organizing public speaking/presentation workshops and an online collaborative session with learners in the Apple Developer Academy at POSTECH in Pohang, South Korea
- **PT Kanisius** Yogyakarta, Indonesia
August 2024–Present
Contract System Engineer
 - **Mail Server:** Implementing and managing the software-side architecture and security system of the company’s mail server.
 - **File Server:** Implementing a file storage server and its user interface for company use.
- **Sanata Dharma University** Yogyakarta, Indonesia
August 2024–December 2024
Teaching Assistant for INFO109: Non-Linear Data Structures
 - **Teaching:** Assisting in teaching the recitation sessions for the Fall 2024 class of *INFO109: Non-Linear Data Structures*
- **Sanata Dharma University** Yogyakarta, Indonesia
July 2024–August 2024
Student Staff
 - **File Server:** Establishing and maintaining an in-house shared file pool server for the archival of thesis documents.
 - **Database Laboratory:** Maintaining the computing infrastructure of the university’s Database Laboratory
- **Indonesian International Student Mobility Awards** Philadelphia, PA, United States of America
August April 2023–December 2023
Co-Student Representative
 - **Leadership:** Assisting the Student Representative in their duties in leading 20 national scholarship awardees

EDUCATION

- **Sanata Dharma University** Yogyakarta, Indonesia
August 2021–January 2025
Bachelor of Science, Informatics; CGPA: 3.92/4.00
- **University of Pennsylvania** Philadelphia, PA, United States of America
August 2023–December 2023
IGSP, Computer Science; Grades Average: 86.38%
- **Budi Mulia Dua International High School** Yogyakarta, Indonesia
July 2018–June 2021
Secondary Education, Natural Sciences; Grades Average: 86.07%

PROJECTS

- **Photo Processing Pipeline for Removing Spatially-Variant Motion Blur:** This research was done to fulfill the thesis requirement for my undergraduate degree in computer science/informatics. The work for this research was based on a final project I did as an exchange student at the University of Pennsylvania. Done through a highly different approach, this is a new and improved version of that project.
- **Family Registry Data Administration System:** Built an online administration system to manage the family registry data of families living in Padukuhan Candi IV, Gunungkidul, Yogyakarta, Indonesia.
- **Coffee Beans Inventory System:** Built a React-based web application to manage the inventory system of Tani Coffee, a local coffee beans supplier in Bandung, West Java, Indonesia.
- **Smart Image Motion Blur Removal using Inertial Sensor data and Convolutional Neural Networks:** This project was done for a *CIS 5810: Computer Vision & Computational Photography* final project at the University of Pennsylvania. The goal was to create a tool to cancel out motion blur from images through the aid of inertial sensor movement data that was recorded when the target photo was taken.
- **Car Rental Company Information System:** This project was a 4-month long effort to design and implement an information system for a local car rental company in Yogyakarta—Kedan Trans & Tour. The effort ranged from creating detailed database relationships, along with their iterative normalizations, to MVC diagrams and GUI mock-ups. The system was later implemented into an app for use by the rental company.

SKILLS

- **Specialized Area:** Web Development, Java Development, Computer Vision, Cryptography, Computer Network Infrastructures, Network Security, Applied Mathematics, Shell Scripting, Linux Server Administration
- **Programming Languages:** *Highly proficient:* Python, C, C++, C#, Java, JavaScript, TypeScript, PHP, Shell, Swift; *Comfortable:* MATLAB, R, Lua, NASM Assembly, GAS Assembly
- **Markup Languages:** HTML, LaTeX, Markdown
- **Web Technologies & Infrastructures:** Apache, Laravel, React, Cloudflare Pages, Oracle Cloud Infrastructure (OCI)
- **Database Systems:** SQL (Structured Query Language) databases; such as: MySQL, MariaDB, SQLite, Oracle Database, Cloudflare D1
- **Data Science & Machine Learning:** TensorFlow, PyTorch, OpenCV, MATLAB Computer Vision Toolbox, Pandas, NumPy, SciPy, Scikit
- **DevOps & Version Control:** Git, GitHub, GitLab, Docker, Kubernetes, Vagrant
- **Mathematical & Statistical Tools:** Matplotlib, Wolfram Mathematica, MATLAB Statistics and Machine Learning Toolbox
- **Operating Systems:** Debian, Ubuntu, Arch Linux, macOS

HONORS AND AWARDS

- **Apple Developer Academy Scholarship at Universitas Ciputra:** The Apple Developer Academy scholarship supports a ten-month long study at the Apple Developer Academy in Universitas Ciputra Surabaya for the 2025 cohort (February 2025–December 2025).
- **IISMA 2023 Fully-Funded Scholarship to study at the University of Pennsylvania:** This is a fully-funded scholarship to study at the University of Pennsylvania for one semester from the Indonesian Government's Indonesian International Student Mobility Awards (IISMA) program.
- **Indonesian National Science Olympiad (OSN) Biology at the Provincial Stage of the Special Region of Yogyakarta:** I was ranked 23rd among all the competition's participant in the Special Region of Yogyakarta province of Indonesia.