

Education and Certifications

- **B.S. Computer Science**, Batangas State University – NEU, Philippines. **2023-2026 (Expected)**

Relevant Coursework: Parallel Computing, Software Engineering, Data Structures

- **Naga City Science High School**, Science, Technology and Engineering (STEM) **2022**
- **CCNA: Introduction to Networks** **January, 2024**

Projects

RedTalks | *JavaScript, HTML/CSS, MERN*

github.com/DirkSteven/RedTalks

- Led the development of RedTalks, a one-stop online community for Batangas State University, overseeing technical decisions, system design, and team leadership while utilizing the MERN stack.
- Integrated backend and frontend components developed by the team to ensure the functionality of the application.
- Developed the fundamental algorithms for sorting posts, scoring and ranking systems of the application, allowing the team to have a reusable code component for the project.

PyCeal | *Flask, HTML/CSS, SQLite, SQLAlchemy*

github.com/DirkSteven/pyceal2

- Led and managed the development team of PyCeal, a secure ID generator using Flask and SQLite, integrating steganography to enhance data security.
- Created and optimized the steganography algorithm and decoder, designing them to securely encode sensitive information into images and efficiently decode it when required.
- Configured and developed all backend functionalities of the app using Flask, handling server-side logic and database integration, ensuring seamless integration and smooth operation of the application.

NetWoink | *C#, WPF*

github.com/DirkSteven/NMS

- Spearheaded the development of NetWoink, a Network Management System (NMS) built using C# and WPF, making key technical decisions and coordinating team efforts throughout the project.
- Implemented the core algorithms of the application by leveraging various networking protocols, including Address Resolution Protocol (ARP) and Simple Network Management Protocol (SNMP), creating the essential features of the application.
- Created and implemented the skeletal UI framework, establishing a structured and efficient base for further development by other team members.

BSU Marketplace | *Flask, HTML/CSS, JavaScript, MySQL*

github.com/DirkSteven/bsushop

- Oversaw the development of BSU Marketplace, an e-commerce web application for Batangas State University, managing the project from concept, including system design, to completion.
- Built the backend structure of the application, including the core CRUD functionalities, ensuring efficient data handling, scalability, and seamless integration with the frontend.
- Designed and normalized the database systems, eliminating redundancy and ensuring efficient data storage and retrieval.

JobBili | *Dart, Flutter*

github.com/DirkSteven/JobBili

- Currently working on a mobile app JobBili, a collaborated side project aimed to create a decentralized platform for general contracting services using Dart and Flutter, overseeing the development from scratch.
- Currently working on the frontend design of the app, as well as implementing necessary backend functionalities associated with it.

Languages, Technologies and Skills

- **Languages:** Dart, Python, C#, C/C++, JavaScript
- **Technologies:** Flutter, Flask, MERN, HTML/CSS, MySQL, SQLite, Firebase, MongoDB, Git, WPF, Figma, Canva
- **Technical Skills:** Database Modelling (ERD, Normalization), Steganography, CRUD Operations, REST API
- **Soft Skills:** Team Leadership, Problem Solving, Communication, Collaboration, Time Management