

Work Experience

Freelance Software Developer

August 2023 - Present

- Successfully deployed a few applications that are developed with Java/PHP/SQL/JavaScript/React/WordPress/HTML and CSS
- Implemented security measures
- Used GitHub as version control
- Developed RESTful APIs
- Handled and designed advanced SQL databases
- Used design patterns such as MVC and Singleton
- Tested code to be free of bugs
- Ensured code performance efficiency
- Developed and maintained user-friendly interfaces
- Learned mostly about UI/UX, managing desktop applications (packaging and deploying updates), security, and handling clients

(Intern) Software Engineer

Creotec Philippines Inc.

July - September 2022

- Led a technological team of 3 people, and was responsible for technical decisions.
- Hugely contributed to a mobile app that is now integral to a company's operations. Contributed by making the whole skeleton and its navigation system, ensured functionality, added some features, and helped with testing.
- Made optimization changes to a mobile application by changing some animation logic to where it does not crash more often on older phones anymore.
- Mentored 6 of my co-workers on **Unity and C#** as the only experienced one.
- Learned that communication is one of the most important skill as a professional.

Skills

- Proficient - PHP | MySQL | JavaScript | HTML | CSS | Java
- Experienced - Unity | React
- Familiar - Spring Boot | Python | C#

Soft Skills - Communication

Top Projects

- **A Desktop Enterprise Application - For a client who manages a resort.**
  - Made with JavaFX and Sqlite.
  - Goal is to make it easier and more secure to manage bookings, by having data enforcements and an intuitive modern GUI.
  - Most notable features are: an event history system, and generating detailed summary report PDFs.
  - Biggest challenges are security/auth, table filtering system, and efficiently retrieving and displaying data about the free slots available within a certain date range into the GUI (in which efficiency was significantly boosted by doing dynamic programming).
- **Technoponics** - The **software part of my bachelor thesis**, a semi-automated aquaponics system, which is a runner-up for the best research project out of 20 projects.
  - It uses an Arduino Mega as the microcontroller, and PHP, MySQL, JavaScript, and Chart.js for the web applications.
  - Has good file handling, and good arduino memory optimization.
  - Goal was to make use of technology to make agriculture more efficient.
  - With its web applications, it can store data to an SD card and a database, let a user view and download data with their devices, send email notifications, and save/load machine settings from the SD card storage.
  - It has 2 separate web applications, online and local. The online one is only for remote monitoring, and the local one is for most of the functions, but has minimal frontend design due to the limited resources of the arduino.
  - For the emails, I used PHPMailer instead of SMTP.js to save arduino resources by using the online web host's resources instead.
- **Pomodoro Project** - A **personal project** that boosts and helps control one's productivity.
  - A web application that uses PHP, MySQL, and JavaScript.
  - Developed this to solve a personal problem of lacking productivity, and has indeed helped me become more productive.
  - What makes it unique is the saved data can be analyzed through a detailed dashboard. It also features comments/notes instead of just numeric data, for better tracking.
  - Is dynamic and its structure is based on data.

Education

Bachelor of Science in Computer Engineering

Lorma Colleges

September 2019 - June 2023

- 3.7 GPA | Half-Scholar
- Awarded as The Best Programmer of The Batch

Additional

- **Over 150 Leetcode and Hackerrank problems solved** - Mostly data structures and algorithms
- **(05/24/2023) DICT Diagnostic Exam Passer** - A national (Philippines) coding exam conducted face-to-face
- **(15/03/2019) Hackathon Runner-Up Out of 10 teams** - Held locally at San Fernando, La Union
- **Seminars Attended**
  - (04/27/2023) Exploring the frontiers of Extended Reality
  - (08/28/2022) StackLeague x Angular PH: GitHub Actions (Deploying Your Apps on the Fly)
  - (18/03/2019) ICT Summit San Fernando
- **Certificates of Participation**
  - The Institute of Computer Engineers of the Philippines Leadership Training (09/2019)

Links

- **GitHub:** <https://github.com/KKKosmo>
- **LinkedIn:** <https://www.linkedin.com/in/louis-manila-060178284/>
- **Portfolio Website / Personal Website:** <https://kkkosmo.github.io>