Work Experience

(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 | Arduino
- Experienced Unity
- Familiar Spring Boot | Python | C# | GSAP

Soft Skills - Communication

Top Projects

- Pomodoro Project A tool 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.
- Future-proof in terms of not needing architecture updates, as it auto generates panels based on the current data and date.
- **Technoponics** The **software part of my bachelor dissertation**, 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.
- TSMFII (Tokai Seat Motor Final Inspection Instructions) A project for my internship at Creotec.
 - Mobile application made with Unity/C#.
 - The company who requested the app has integrated it into their procedures and has made their production faster.
 - The objective was to make a detailed interactive production manual/all-in-one-tool that a certain company can use.
- Used Unity because boss told us to, but I would have chosen something better for a small app and also relatively easy to learn for my co-workers who were new to mobile development, like react native or flutter.
- Resort Booking Website A booking website requested by a resort that has around 200 users or guests per week.
 - Data is handled using MySQL and PHP, and some JavaScript for frontend. As of now, it is not actually deployed but it almost is.
 - Goal is to make the resort's booking process automated to make it easier and more secure both for the guests and the owners.
- Biggest challenges are security, handling payment, and accurately and efficiently retrieving the free slots available within a certain date range (in which efficiency was significantly boosted by doing dynamic programming).

Education

Bachelor of Science in Computer Engineering

Lorma Colleges

2019 - 2023

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

Additionals

- 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

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