THEON TEO

SOFTWARE ENGINEER

PROFILE

Experienced software engineer in software, web and game development. Enjoys exploring the different aspects of web and app development, trying out various frameworks, languages or APIs and discovering ways to increase interactivity.

CONTACTS

Email: theonteo96@gmail.com
LinkedIn: https://www.linkedin.com/in/theon-teo-80a906101/

See my works at theonteo.com

EDUCATION

2019 - 2023

Digipen Institute of Technology - Singapore
BS in Computer Science in Real-Time Interactive Simulation (RTIS)

- Linear Algebra Teaching Assistant - 2020
- Primarily pursued Editor , Tools , Graphics and Technical Art

2014 - 2016

Singapore Polytechnic - Design School
Diploma In Game Design and Development

- Design School Club - Publicity Head

CAREER

2018 - 2022

Software Engineer Intern - Motional 2022 (Current)

- Worked on improving and implementing messaging protocols for various software state machines.

- Created an analyzing software to gather debugging information and arrange them in a simple to read webpage.

Training Specialist - Mastereign - 2018 to 2019

- Taught coding, media and game development related programmes to primary and secondary students.

SKILLS

High Level Languages
C , C++ , Bash, Python, GLSL

Web Development
JavaScript, TypeScript , HTML, CSS, Material UI, Axios

Libraries
ImGui , OpenGL , Qt , three.js

Frameworks/IDE/Systems
React, Visual Studio, Visual Code, Github

Commercial Engines
Unity , Unreal

FEATURED PROJECTS

KENEK - Digital smart card and profile for businesses
Web development | SaaS | Personal project

- SaaS to build simple landing profiles for businesses to show their products and services
- Product planning from conception to final vision.
- Created frontend and bridge to backend.
- See more here: https://kenek.me

React , html , CSS , Material UI , TypeScript , Netlify , Axios, Github

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Bobots - 3D NFT Collection Project
Website | Procedural | Personal project

- Use of Unity engine for procedural avatar creation of NFTs.
- Working with artist to create avatar systems.
- Created website for hosting game engine to view models in real-time.
- See more here: https://bobots.io

React , Unity - C# - WebGL , html , Material UI , TypeScript , Netlify , Github , Maya

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SIMPLE. 3D C++ Engine
Graphics | Tools | Editor | Technical Art

- Worked with software engineers with different areas of experiences to put together the custom engine.
- Developed graphics pipeline required to render complex large 3d scenes.
- Created custom optimization techniques depending on the projects requirement to improve performance.
- Built editor with ImGui for designers to use edit levels and manipulate data.
- Custom tools to populate environment such as mesh sculpting and mesh painting.
- See more here: https://theonteo.com/project-simple

C++ , C# , OpenGL , GLSL , ImGui , GitHub - CICD Workflow

Real-Time interactive React Websites
Front-end | Web Development | Personal projects

- Built multiple websites that explores the application of a website with 3d elements and front-end aspects.
- A website with 3D Point Clouds that together forms an image.
- A 3D environment website that pans a camera as the user scrolls.
- Worked with a back-end developer for a financial tracking app where users can track their financial spending.
- See more here: https://github.com/theonteo/image-point-cloud

React , three.JS , html , CSS , Material UI , JavaScript , TypeScript , Netlify , Github

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Multiplayer UDP C++ Engine
Engine | Networking | Rendering

- Created a base 3d engine for team members to build upon.
- Winsock setup to connect to various host.
- Designed shaders and created rendering pipeline for scene rendering.
- See more here: https://github.com/theonteo/multiplayer-udp-winsock

C++ , Winsock , OpenGL , GLSL , Github

AWARDS

See more at theonteo.com

2020
Digipen Awards
- Best Technology
- Runner Up Best Freshman Game
- Runner Up Most Innovative Game

2011-2012
Singapore Game Creation Competition
- First Runner Up - 2011
- Second Runner Up - 2012