Curriculum Vitae

Terence Lim
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https://terence9213.github.io/

[Education]

Bachelor of Science, Information Systems, Singapore Management University   2017

> Second Major: Marketing

> Distinction in Software Engineering Module

> Distinction in Technology and World Change Module

> Distinction in Creative Thinking Module

> Distinction in Internet of Things Module

Exchange Program, University of St Gallen, Switzerland   2016

A-Level Certification, Catholic Junior College   2010

O-Level Certification, St Joseph's Institution   2008

Diploma in Entrepreneurship Development, ERC Institute   2008

[Work Experience]

Refract Technologies

Software Engineer R&D (Jan 2022 - Aug 2024)

Responsibilities

- Research and development
- Worked in a cross functional, multidisciplinary R&D team
- Collaborated with game developers, marketing, and business development
- Supported events and demonstrations
- Developed proprietary systems
- Bug fixing and problem solving

Projects
- **AXIS**
  Motion capture hardware devices for gaming and sports
  IMU based wearable devices that communicate wirelessly to a dongle, providing gyroscope, accelerometer and magnetometer readings that are computed into accurate rotational data

- **Steam VR Driver**
  Developed Steam VR driver for AXIS to interface with Steam VR games
  Ensured compatibility with common VR games

- **Proprietary Sensor Calibration Solution**
  Collaborated with firmware and hardware specialists to develop a single step calibration method for quick and accurate on-body sensor calibration

- **Proprietary Virtual Skeletal System**
  Developed an in-house virtual skeletal system to enable advanced body movement estimation and interpolation

- **Visualization and Debugging Tools**
  Collaborated with UI specialist to develop 3D visualization tools for end user control center and internal R&D and debugging

- **Tools and Support**
  Worked closely with game dev team and SDK developer to build tools and support development of games, demo prototypes, and proof-of-concept projects utilizing AXIS hardware

Kioxia Singapore (Formerly Toshiba Memory Singapore)
Analyst Programmer (Apr 2018 - Dec 2021)

Responsibilities

- In-house application development (internal business applications)
- Research and development
- Redesign legacy systems
- Database management
- Environment: Windows Server / SQL & Oracle Database / Tortoise SVN

Projects
- **Business Intelligence Visualisation Tools**
  Built graphical BI tools for sales and marketing teams on company intranet

- **Leave Application System**
  Built Leave Application system from the ground up
  Liaised with HR team to gather requirements

- **Time Management System**
  Built employee time in/out tracking system with overtime application
  Automated data collection from 3rd party card access security system
  Integrated with Leave Application system

- **Automated Invoice Printing Solution**
  Built an automated solution to generate invoice PDFs and send to printing queue
  Utilized SSRS Report Builder, batch scripts and VBScript

- **Door Access User Interface**
  Created a simple browser application HTML/CSS/Javascript
  Interfaced with 3rd party phone system API

- **Invoice Optical Character Recognition (OCR) Processing (Currently in progress)**
  Researched open source OCR solutions to process client invoices for database storage
  Utilized Tesseract for Command Line, XpdfReader and Nlohman JSON C++Lib

KNOREX

Internship (Summer 2016)

Responsibilities
- Web development
- Search Engine Optimisation (SEO)

Projects
- **Product Website Redesign**
  Utilized HTML/CSS templates
  Researched modern web design UI/UX best practices
  Researched and implemented SEO

[Technical Skills]

Programming
- C++, C#, ASP.NET, Java, Javascript, HTML/CSS, SQL

Development Tools
- Visual Studio, Netbeans, SQL Server Management Studio, SQL Server Reporting Services, Toad for Oracle, Unreal, Unity

Source Control
- GitHub, BitBucket, Tortoise SVN

Others
- Photoshop, Audacity, Abelton

[Personal Accomplishments]

Developed a Sine wave audio synthesizer in Java
- Generated frequency table based on 12-Tone Equal Temperament
- Wrote a Sine wave function that outputs to the sound buffer at 44100Hz rate

Developed a browser based interactive keyboard synthesizer
- Utilized Javascript Web Audio API and HTML/CSS
- https://terence9213.github.io/synth.html

Developed Eternity Quest, a browser based retro style vertical shooter
- Utilized Javascript Canvas animation tool
- 100% Javascript game engine (no 3rd party library or game engine)
- https://terence9213.github.io/eternityquest.html

Developed an interactive fireworks simulation
- 100% Javascript animation engine with time dilation function
- https://terence9213.github.io/fireworks.html

[Co-Curricular Activities]

SMU Climb Team Marketing Manager 2015
- Coordinated publicity campaign in conjunction with freshman induction period to boost publicity and increase membership of the club

SMU Gravical Marketing Director 2015
- Organised one of the largest rock climbing competitions in Singapore

St Joseph's Institution Robotics Club Chairman 2008
- Organised orientation and training for new club members