

SANTIPAB TIPPARACH

WEB APPLICATION AND GAMES DEVELOPER

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PROFILES

Itch.io
Twitter
LinkedIn
GitHub

ABOUT

Full stack software developer in React, Node JS, and ASP .Net. Experience with implementation of complex client side web applications using modern Javascript technologies and previous experience working on scalable high-performance back end server infrastructure. My favorite hobby is designing and implementing video games with Unity game engine.

WORK EXPERIENCE

Co-Founder, Archenemy Interactive

May 2016 - March 2019

Founded group to develop VR content for commercial games and for local organizations and businesses. Worked as lead on the Fleet Hackers VR project, served as lead writer, programmer, and art design. Developed VR tools for motion capture, ragdoll systems, and robotic sensor controls. Prototyped many games including Ixion and Tower of the Sun for HTC Vive.

HIGHLIGHTS

- Won many local awards for outstanding innovation and creativity in the local Fargo/Moorhead Area
- Held the championship for Fargo Game Makers 2 Years in a row.
- Continue to spread VR education among Fargo youth, and advocate for VR development.

Senior Software Engineer, Bushel Inc.

April 2020 - January 2021

Works on Bushel's cloud payments solution, back end API developer. Helped with dev ops tasks such as setting up Docker containers and Azure Dev Ops pipelines. Worked with event messaging in Pulsar and contributed to architectural design decisions involving microservices. Utilized Java Spring Boot and Cockroach DB.

SQL Developer, Marvin Windows

March 2018 - April 2020

Database administration, full stack web-development, and HMI(human-machine interaction) application development. Works on web applications that run on React, Node JS ASP.Net and Ignition to create solutions automation and manufacturing processes.

HIGHLIGHTS

- Led the adoption of DevOps, Continuous Integration, Distributed Version Control Systems, and created Development and Testing environments for SCADA Systems.
- Created web based infrastructure for remote client management across 4 Marvin Plants.
- Developed web applications for managing machine settings for various parts configurations.
- Database schema design and overhaul of many major backend systems.

Teaching and Research Assistanships, NDSU

January 2016 - May 2018

Employed as a teaching assistant for the computer science department in CS 160. Then transitioned into a Research assistant for the Upper Great Plains Transportation Institute(UGPTI). Maintained databases, legacy code, and successfully lead the development multiple new product releases for the DOT(Department of Transprotation) and UGPTI offices.

HIGHLIGHTS

- Worked on realtime data capture of roadway conditions using an Android device.
- Developed a new version of the Geographic Roadway Inventory Tool with ReactJS, Semantic UI, and Node JS.

Software Developer, OATI

June 2013 - November 2015

Employed as a professional developer creating software for the one of the country's largest energy industry software company. Developed solutions to schedule transmissions of

electrical energy and made strides in advancing the company in automated testing, and application-to-application communication infrastructures.

HIGHLIGHTS

- Lead developer of the Realtime Net-Scheduled Interchange application for monitoring real-time and near future transmissions across power grids.
- Lead development on integration of inter-company data transfer using SOAP XML via TSL.
- Improved testing infrastructure by creating Unit Tests in NUnit and training new QA teams for automation of Unit Tests.

Internship - Software Developer & Technical Designer, Karvako Engineering

May 2012 - March 2013

Worked as a software developer. Created a scheduling program, and a GIS application that interfaced with Google Earth. In addition, also designed 3D models for engineering projects, or future development plans. Used 3Ds Max and Gimp to develop a photo-realistic demonstration of the Bemidji Airport existing and development sites, along with a virtual tour of the Bemidji Airport for potential investors, landscape developers, and Civil Engineers.

VOLUNTEER WORK

Teacher, CHARISM STEM Program

February 2017 - May 2018

Helped with Unity, VR, and Game Maker education program for middle school students grades 6-8. Taught kids to develop games using C# and Game Maker scripting.
<https://www.charism.org/>

Teacher, West Fargo Public Schools STEM Program

December 2018 - March 2019

Helped bring game development education to a larger audience of students with 2D and VR video games in Unity.

Teacher, uCodeGirl

June 2018 - June 2018

Ran a boot camp for VR development for young adults. Used Google Cardboard and Android phones to create a VR balloon popping game.
<https://www.ucodegirl.org/>

Webcast Operator, FIRST Robotics MidWest Regional Competition

March 2019 - March 2019

Ran the Twitch stream for the FIRST robotics competition.
<https://info.firstinspires.org/destination-deep-space>

SKILLS

Web Development

HTML CSS Javascript JQuery/JSON NodeJS ReactJS VueJS PHP SQL Server MySQL
MongoDB PostgreSQL

Game Development

Unity 3D Space Simulation Physics Systems Character Animation/Interaction Systems
Virtual Reality Locomotion Systems Multiplayer and Cross Platform Games

Graphics Programming

OpenGL DirectX HLSL/GLSL

General Programming

C#, WPF, .Net, WCF Java, Android Development C/C++ Python NUnit/JUnit Testing

EDUCATION

Masters, Computer Science - North Dakota State University
January 2016 - August 2019

Bachelors, Computer Science - Bemidji State University
August 2010 - May 2013

Associates, Computer Science - Nort Virginia Community College
August 2009 - May 2010

AWARDS

1st Prize at Fargo Game Jam 2018 - Fargo Game Makers
04 November 2018

The development of Tower of the Sun, an interactive social simulation game about a society that solves its problems with sacrifices.

1st Place at the Fargo Hackathon 2018 - Fargo Hackathon

21 October 2018

For the development of Storm of Fire, and education simulation about fire safety.

2nd Place at the Fargo Hackathon 2017 - Fargo Hackathon
22 October 2017

For the driving and zombie-fighting simulation using the Wrld API and Fargo Fire Department data.

1st Prize at Fargo Game Jam 2017 - Fargo Game Makers
19 July 2017

Development of the prototype space horror survival game Ixion.

3rd place at the Innovation Challenge NDSU 2017 - NDSU
Research Park
20 April 2017

For the development of Fleet Hackers - and immersive VR space simulation.

PUBLICATIONS

BeachBot: Crowdsourcing Garbage Collection with
Amphibious Robot Network
01 March 2018

<https://dl.acm.org/citation.cfm?doid=3173386.3177832>

An interconnected network of UAS as a system-of-systems
01 September 2017

<https://ieeexplore.ieee.org/document/8102148>)

An internetworked self-driving car system-of-systems
01 June 2017

<https://ieeexplore.ieee.org/document/7994957>

INTERESTS

Computer Graphics

Game Development

Creative Writing

Concept Art/3D Modeling/Texturing/Animation

Space Exploration

Astronomy

LANGUAGES

English

Fluency: Native speaker

Thai

Fluency: Native speaker