

Santipab Tipparach, Web Application and Games Developer

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SUMMARY 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.

EXPERIENCE Archenemy Interactive, Co-Founder

2016-05-01 — 2019-03-17

<https://archenemyinteractive.com/>

- 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.
- 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.

Bushel Inc., Senior Software Engineer

2020-04-24 — 2021-01-29

<https://bushelpowered.com/>

- 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.

Marvin Windows, SQL Developer

2018-03-26 — 2020-04-24

<https://www.marvin.com/integrity>

- 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.
- 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.

<https://www.ugpti.org/dotsc/about/>

- 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.
- 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.

OATI, Software Developer

2013-06-01 — 2015-11-20

<https://www.oati.com/>

- 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 infratructures.
- 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.

Karvacko Engineering, Internship - Software Developer & Technical Designer

<https://archenemyinteractive.com/>

2012-05-01 — 2013-03-01

- 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.

PUBLICATIONS

BeachBot: Crowdsourcing Garbage Collection with Amphibious Robot Network, ACM

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

2018-03-01

An interconnected network of UAS as a system-of-systems, IEEE

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

2017-09-01

An internetworked self-driving car system-of-systems, IEEE

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

2017-06-01

AWARDS1st Prize at Fargo Game Jam 2018, Fargo Game Makers

2018-11-04

- 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

2018-10-21

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

2nd Place at the Fargo Hackathon 2017, Fargo Hackathon

2017-10-22

- 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

2017-07-19

- Development of the prototype space horror survival game Ixion.

3rd place at the Innovation Challenge NDSU 2017, NDSU Research Park

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

2017-04-20

VOLUNTEERING CHARISM STEM Program, Teacher

2017-02-01 — 2018-05-01

<https://www.charism.org/>

- 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.

West Fargo Public Schools STEM Program, Teacher

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

2018-12-22 — 2019-03-01

uCodeGirl, Teacher

2018-06-18 — 2018-06-22

<https://www.ucodegirl.org/>

- Ran a boot camp for VR development for young adults. Used Google Cardboard and Android phones to create a VR balloon popping game.

FIRST Robotics MidWest Regional Competition, Webcast Operator<https://info.firstinspires.org/destination-deep-space> 2019-03-13 — 2019-03-16

- Ran the Twitch stream for the FIRST robotics competition.

EDUCATION North Dakota State University

2016-01-11 — 2019-08-30

Masters - Computer Science

Bemidji State University

2010-08-22 — 2013-05-10

Bachelors - Computer Science

Nort Virginia Community College

2009-08-03 — 2010-05-10

Associates - Computer Science

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

LANGUAGES English (*Native speaker*) , Thai (*Native speaker*)**INTERESTS** Computer Graphics, Game Development, Creative Writing, Concept Art/3D

Modeling/Texturing/Animation, Space Exploration, Astronomy