Tanawat Khunlertkit

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Software Engineer

Core Competencies

Go · Python · C# · Java · C · C++ · SQL · JavaScript
ARM7TDMI · MIPS · Verilog · Quartus
Redis· Docker · Git
English · Thai

Work History

November 2018 - Present
Johnson Control International Milwaukee, WI
Develop algorithms and cloud application running on the Nexsys cloud service. The application implements model predictive controls in an attempt to predict and control the temperature set points of the building with the constraint to maximize the savings of resource costs. My primary contributions include implementation of the logic to control roof top unit systems written in C#. In an extension to the project, data science platform is being develop in Python, in an attempt to reduce the required knowledge of a query language. The main objective of the platform is to retrieve the data from the database where users can ask the question as an English language.

Summer 2018
Mitel Networks Corporation Milwaukee, WI
Developed Internet Of Things platform as a service. The platform allows users to create a network of devices that send data to the server and sends alerts if the reading values exceed a certain threshold. My primary contributions include analysis rules platform that can be configured by the user for devices to be evaluated when the server received the data.

Education

2013 - 2020
PhD Computer Science Milwaukee, WI
University of Wisconsin - Milwaukee
Quality of Life Prediction: Using patient database for statistical analysis in order to predict the length of hospital stays and the probability of readmission within 30 days of discharged based on the current condition of the individual patient.

2010 - 2012
MS Computer Science Milwaukee, WI
University of Wisconsin - Milwaukee
Security Protocols on Vehicle-to-Vehicle Communication: Implementation and timing comparison between Elliptic Curve Cryptography and Advanced Encryption Standard.

2007 - 2009
BS Computer Engineering and Computer Science Madison, WI
University of Wisconsin - Madison
Senior Project: Stepper Motor Controller. Design and written in Verilog. Implemented on ARM-FPGA board, to be used as the basis for a wirelessly controlled turret.

Teaching History

2010 - 2019
University of Wisconsin - Milwaukee Milwaukee, WI
Plan and develop curriculum for lab sessions of Software Engineering, intermediate programming using Java, and client-side application development. Grader for additional five courses including computer architecture, computer networks, algorithm design and analysis, and operating systems.