Tanawat Khunlertkit

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Education

University of Wisconsin-Milwaukee, Milwaukee, WI

Ph.D. Computer Science

Date of Graduation: Expected December 2018

Dissertation Thesis: Using patient database for statistical analysis in order to predict the length of hospital stays of the individual patient based on the current condition

University of Wisconsin-Milwaukee, Milwaukee, WI

Master of Science in Computer Science

Date of Graduation: December 2012

Research Objective: Implementation of security protocols on Vehicle-to-Vehicle Communication. Timing comparison between Elliptic Curve Cryptography and Advanced Encryption Standard.

University of Wisconsin-Madison, Madison, WI

Bachelor of Science in Computer Engineering and Computer Science

Date of Graduation: December 2009

Work Experinece

Fall 2012 - Present **Teaching Assistant**

University of Wisconsin-Milwaukee

Plan and develop curriculum, along with other teaching materials, for lab sessions. Supervise graduate students on semester projects. Classes include:

- *Software Engineering (Spring 2014 - Present)*: Develop weekly activities for students and supervise students on Software Design Pattern.
- *Intermediate Computer Programming (Fall 2013)*: Based on Java programming language using classes, inheritance, exceptions, and simple Graphical User Interface.
- *Introductory to Computer Programming (Fall 2012 - Spring 2013)*: Basic Concepts of programming languages.
- *Introduction to Web Document Production (Spring 2013)*: HTML and CSS.

Summer 2014 **College for Teens/College for Kids Program**

University of Wisconsin-Milwaukee

Develop and teach courses related to computer programming design for high school students. Courses include:

- *Create Your Own Computer Games*: creation of Pong and Alien Invasion using Visual Basic.
- *Programming Language*: Basic syntax and logic for programming in Java
- *Design Your Web page*: Using the mixture of Dream weaver and HTML to create a simple web page.

Summer 2007 **Project Assistant**

University of Wisconsin-Madison

Java programing of Monte Carlo Simulation to identify optimal joint fixtures for automotive assembly line.

Academic Achievements

Spring 2013 - Spring 2015	**CEAS Dean's Scholarship** Scholarships are given to assist CEAS faculty in recruiting talented students by offering multi-year support to new exceptional graduate students.
Fall 2011	**Chancellor's Graduate Student Awards** Awards are given to one of the best students who shows great potential.

Academic Experience

Spring 2015	**Neural Network and Brain Modeling** Using Neural Networks and the concept of Principle Component Analysis as a machine learning algorithm to recognize digital hand-written numberics.
Spring 2013	**Information and Coding Theory** Implementation of Huffman Coding Compression based on the given text input written in Java.
Fall 2012	**Android Programming** Programming android device to work with micro controller via Bluetooth. Commands include reading the potentiometer and reading the temperature on the embedded system written in C.
Spring 2011	**Computer Networks Laboratory** Asterisk phone server on Linux router using Session Initiation Protocol (SIP).
Fall 2010	**Software Engineering** Music Player in Java. Features include drag-and-drop play list from a text file.
Spring 2009	**Embedded System Design** Stepper Motor Controller Design written in Verilog, Implemented on ARM-FPGA board, to be integrated with other components.
Spring 2009	**Intro to database Management System** Design Back-end for a Simple Database System written in C++.
Fall 2008	**Digital Design and Synthesis** Design Calibrated Temperature Integrated Circuit using Verilog and Synthesize with Synopsys.
Fall 2008	**Intro to Programming Languages and Compilers** Conversion from high level programming language (C) to Assembly language (MIPS).
Spring 2008	**Introduction to Operating Systems** Simulator for comparison of CPU Scheduling Algorithms (Clairvoyance and Priority Queue) written in C.
Fall 2007	**Introduction to Computer Architecture** Design a 16-bit Microprocessor with 16 instructions set written in Quartus.

Scope of Excellence

Computer Languages:	Python, Java, C, C++, HTML and CSS, SQL, Go, MATLAB.
Assembly Language:	ARM7TDMI, MIPS.
Hardware Language:	Verilog, Quartus.
Operating Systems:	Windows, Linux, Mac OS.
Languages:	English (Fluent) and Thai (Fluent).