Tanawat Khunlertkit

2466 N Oakland Ave. #320
Milwaukee, WI, 53211
(608) 358-3489
tkhunlertkit@gmail.com
tanawat@uwm.edu

Education

University of Wisconsin-Milwaukee, Milwaukee, WI
Ph.D. Computer Science

Date of Graduation:	Expected December 2018
Dissertation Research:	Using patient database for statistical analysis in order to predict hospital stays of the individual patient based on the current condition
Advisor:	Professor Mukul Goyal

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.
Advisor:	Professor Hossein Hosseini

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 Highschool 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 single digits.

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 with Session Initiation Protocol (SIP) capability.

Fall 2010 **Software Engineering**
Music Player coded 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:	Java, C, C++, Python, HTML and CSS, SQL, Go.
Assembly Language:	ARM7TDMI, MIPS.
Hardware Language:	Verilog, Quartus.
Operating Systems:	Windows, Linux, Mac OS.
Languages:	English (Fluent) and Thai (Fluent).