

PANYA CHANAWANGSA

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Education

- PH.D. CANDIDATE IN COMPUTER SCIENCE August 2010—present
University at Buffalo, the State University of New York
Advisor: Dr. Chang Wen Chen (chencw@buffalo.edu)
- B.S. IN COMPUTER ENGINEERING, *SUMMA CUM LAUDE* June 2010
University at Buffalo, the State University of New York
Computer Engineering GPA 3.99/4.00 scale, ranked first in the class of 2010

Professional Experience

- GRADUATE RESEARCH ASSISTANT, UBMM LAB, UNIVERSITY AT BUFFALO June 2011—present
Conduct research in smart vehicles and intelligent transportation systems
- SOFTWARE DEVELOPMENT INTERN, AMAZON.COM, SEATTLE, WASHINGTON June 2013—August 2013
Developed a sophisticated computer vision system to enhance warehouse security.
- RESEARCH ENGINEER INTERN, XEROX CORPORATION, ROCHESTER, NEW YORK August 2012—April 2013
Developed a prototype Android application for smart parking applications.
- GRADUATE TEACHING ASSISTANT, UNIVERSITY AT BUFFALO August 2010—April 2013
Taught weekly recitations for Real-time and Embedded Systems and Computer Organization
- UNDERGRADUATE TEACHING ASSISTANT, UNIVERSITY AT BUFFALO January 2010—April 2010
Supervised students in lab assignments in Introduction to Microprocessors
- THOMAS J. EDWARDS LEARNING CENTER, UNIVERSITY AT BUFFALO January 2007—June 2010
Tutored students from various academic disciplines in mathematics, from basic algebra to college level calculus

Pending Patent Applications

- A System and Method for Parking Reservation and Finding Parking Space Suitable for User's Vehicle Size
- Image Assisted Parking Space Availability Searching and Reservation Method and System
- Methods and Systems for Vehicle Theft Detection and Prevention Using a Smartphone and Video-based Parking Technology
- On-street Parking Management Methods and Systems for Identifying a Vehicle via a Camera and Mobile Communications Devices

Technical Skills

- Android: 2+ years of experience developing robust, real-world Android applications
- Computer vision: proficient in Matlab, especially the image processing toolbox, as well as OpenCV
- Programming languages: strong background in C/C++ and Java.
- Assembly: proficient in ARM Assembly and familiar with MIPS Assembly
- Internet: some web design and web programming experience with HTML5, CSS, XML, and PHP
- Database management: proficient in SQL queries and managing a MySQL server
- System administration: maintained a Linux server, servicing 79 students
- Operating Systems: proficient in Linux, Ubuntu, XINU, Windows, and Mac OS

Publications and Research Experience

- Panya Chanawangsa, Chang Wen Chen, *A New Color-Based Lane Detection System via Gaussian Radial Basis Function Networks*, IEEE International Conference on Connected Vehicles and Expo, 2012.
- Panya Chanawangsa, Chang Wen Chen, *A New Smartphone Lane Detection System: Realizing True Potential of Multi-core Mobile Devices*, ACM MoViD, 2012

Awards and Honors

- Dean's Fellowship Award August 2010
- UB International Student Scholarship June 2006—June 2010