1300 University Avenue 5683 Medical Sciences Center Madison, WI

JIA-SHEN BOON

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EDUCATION

Madison, WI University of Wisconsin-Madison

Fall 2014 - Spring 2016

- MS in Computer Science, GPA: 3.94
- Coursework: High Performance Computing; Advanced Machine Learning; Linear Programming; Database Management Systems; Computer Vision; Human-Computer Interaction

Singapore

National University of Singapore

Fall 2007 - Spring 2011

• BEng in Mechanical Engineering, 1st Class Honors, Dean's List (4 semesters), CAP: 4.65/5

EMPLOYMENT

Research Assistant

University of Wisconsin-Madison

Summer 2015

• Conducted research in unmanned aerial vehicles. Supervised by Prof Michael Coen.

Teaching Assistant

University of Wisconsin-Madison

Fall 2014 - Present

- CS570 Introduction to Human-Computer Interaction (Spring 2016)
- CS534 Computational Photography (Fall 2015)
- CS367 Introduction to Data Structures (Fall 2014, Spring 2015)

Research Engineer

Defense Science Organization, Singapore

Aug 2011 - Aug 2014

Autonomous capabilities of autonomous underwater vehicle

- Developed obstacle detection and classification algorithms. Python, C++
- Developed vehicle speed optimization algorithm to determine optimal speed in-mission. MATLAB

Image super-resolution for future platform

• Developed simulator to simulate blurring caused by payload. MATLAB

ADDITIONAL PROJECTS

- The case for visual-inertial SLAM over visual SLAM (2016). Master's project
- CUDA-accelerated feature matching for image stitching (2015). Implemented memory-coalesced feature matcher on an Nvidia GPU that is 108 times faster than a CPU implementation. CUDA
- M. Beyeler. OpenCV with Python Blueprints (2015). Packt Publishing. Invited book reviewer.
- Robust image retrieval using topic modeling on captioned image data (2015). Crawled imgur for over 32K images and 110K captions. Modeled images and captions with LDA and a deep CNN. MATLAB
- Recognizing speculative language in biomedical text (2014). Learned distributed representation of sentences on BioScope and BioMed Central datasets; achieved an F1 score of 88.5%. Python, Java
- Street Fighter 4 character detection (2014). Algorithm detects characters in every video frame using HoG/SVM to analyze players' positional strategy over time. Python

AWARDS & VOLUNTEER WORK

- Microsoft College Coding Competition, 2nd place
- Huskie Hacks, Excellence Award. Hackathon at Northern Illinois University.
- SIGGRAPH 2015 student volunteer
- University of Wisconsin-Madison CS Graduate Summer Research Assistantship
- University of Wisconsin-Madison Special CS Scholarship
- Singapore Autonomous Underwater Vehicle Challenge 2014 judge & committee member
- Robocup 2011 International Top 8 / 34

LANGUAGES & TECHNOLOGIES

• C/C++ (intermediate), Java (intermediate), MATLAB (proficient), Python (proficient), Caffe, git