# BOON JIA SHEN

**EMPLOYMENT** 

#### **Software Engineer**

### Woven by Toyota

March 2022 - Present

Supporting Toyota's autonomous driving initiative

- Tech lead of 4 engineers, building storage layer to deliver continental-scale maps to Toyota
- Organized 300 TB of orthoimage data and made it accessible to internal developers

#### Software Engineer

#### **Amazon Japan**

May 2019 - March 2022

- Built an ETL pipeline that publishes search terms of 2B+ products a day worldwide
- Enabled blocklisting support that blocklists 2B+ search terms a day in Amazon Search

#### Software Engineer

#### Amazon.com

June 2016 - May 2019

- Enabled multi-language support in Customer Q&A for 12MM+ customers in four marketplaces.
- Launched "Have a question?" widget on the detail page, to 500MM+ widget loads a day.
- Built data collection stack that logs 4MM+ search requests daily to a data warehouse.

#### 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 - Spring 2016

- 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

#### **E**DUCATION

#### Madison, WI

#### University of Wisconsin-Madison

Fall 2014 - Spring 2016

- MS in Computer Science, GPA: 3.94
- UW-Madison CS Graduate Summer Research Assistantship 2015
- UW-Madison Special CS Scholarship 2014

#### 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

#### ADDITIONAL PROJECTS

- The case for visual-inertial SLAM over visual SLAM (2016). Master's project
- 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

#### LANGUAGES

• Java (proficient), Python (proficient), Javascript (proficient), MATLAB (proficient)