

# Pengfei Tan

2 Highland Terrace, Malden, MA 02148  
(617) 838-5241 [tan.p@husky.neu.edu](mailto:tan.p@husky.neu.edu)  
Github: <https://github.com/tanpf5>  
Available: **From Jan 2017**

## EDUCATION

---

**Northeastern University**, Boston, MA Expected graduation: Dec 2016  
College of Computer and Information Science Sep 2014 - Present  
*Candidate for a Master of Science in Computer Science* GPA: 4.0/4.0

Related Courses: Algorithms, Database Management, Mobile Development,  
Web Development, Artificial Intelligence, Information Retrieval

**Shanghai Jiao Tong University**, Shanghai, China

College of Software Sep 2010 - Jun 2014

*Bachelor's Degree in Software Engineering*

Related Courses: Data Structures, Algorithm, Database, Operating Systems

## WORK EXPERIENCE

---

**Woobo Inc**, Cambridge, MA

*Software Development Engineer Intern* May 2016 - Present

- Developed an Android app that interacts with children via chat, story telling, game and song playing
- Implemented Android app's communication with server using web socket, applied Android modules like speech recognition, text to speech and alarm manager
- Worked with multiple threads and async operations

**Northeastern University**, Boston, MA

*Graduate Teaching Assistant - CS5200 Database* Jan 2016 - Apr 2016

- Held weekly office hours for doubt solving and helping students in assignments and projects
- Graded assignments and projects for students

**Schepens Eye Research Institute, Massachusetts Eye and Ear, Harvard Medical School**, Boston, MA

*Software Development Engineer Intern* May 2015 - Dec 2015

- Developed a cardboard-based magnifier iOS app called SuperVision+ Goggles, a low-cost vision assistance solution for the visually impaired
- Added new features in SuperVision+ Magnifier, an iOS app with more than thirty thousand users

## ACADEMIC PROJECT

---

**Search Engine with Python**, Northeastern University Jan 2016 - Apr 2016

- Built a search engine with BM25 as a retrieval model, evaluated searching results with others
- Implemented a snippet generation technique and query term highlighting within results

**Squat Buddies Android Game**, Northeastern University Jan 2016 - Apr 2016

- Developed a two-player squat game aiming at helping people enjoy exercising
- Implemented a feature to detect squats by using accelerometer and rotation vector motion sensor

**2048 Game AI**, Northeastern University Sep 2015 - Dec 2015

- Designed an Expectimax search algorithm to calculate optimal moves with a winning rate of 95%
- Improved the AI algorithm by applying a heuristic function to do pruning for search tree

## TECHNICAL KNOWLEDGE

---

**Languages:** Java, Python, Objective-C, HTML, CSS, JavaScript

**Tools:** Android Studio, PyCharm, Git, Xcode, Eclipse, MySQL