# Wangshu Sun

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### **EDUCATION**

M.P.S. in Interactive Telecommunications (ITP), New York University

- · Academic focus: creative technology, prototyping, game design & development
- B.E. in Biomedical Engineering, Southeast University, Nanjing, China
  - Electrical Engineering and Computer Science intensive training class in Chien-Shiung Wu Honors Colleges
  - Related courses: Computer Architecture & Logic Design, Data Structures and Algorithms, Software Engineering

### SKILLS

Front End:	HTML 5, CSS 3, JavaScript, Bootstrap, jQuery, React.js, AngularJS, p5.js, Tone.js
Programming:	C++, C#, Java, Python, Processing, MATLAB, Qt, Assembly, FPGA, Git, Unity 3D, Max MSP
Design:	Photoshop, Illustrator, InDesign, Flash, Axure, GarageBand, Ableton Live, Premiere
Language:	English (Fluent), Mandarin (Native)

### WORK EXPERIENCE

#### OpenBCI | Brooklyn, New York | Research Resident

- Responsible for EEG algorithm research, software development for scalable widgets, and some user interface (UI) design.
- Proposed an EEG attention algorithm for a <u>mind-controlled maze game</u>. Proposed widget-based framework. Designed and developed a scalable Focus Widget. Designed user interface (UI) with higher usability. Fixed FFT calculation.
- Tools: Processing (Java), object-oriented design (OOD), Matlab, Photoshop, user experience (UX) design.

#### Southeast University HCI Lab | Nanjing, China | Front-end Developer Intern

- Responsible for front-end development, user interface (UI) design and user experience (UX) design for website and software.
- Developed departmental website with pixel-level precision, developed a scalable portfolio, designed and developed a scalable Ruby on Rails website. Designed interface, mind map, wireframe and prototype for website and software. Designed poster.
- Tools: HTML / CSS / JavaScript, Git, jQuery, Bootstrap, Sass, Ruby, Photoshop, Illustrator, Axure.

### SELECTED PROJECTS

#### **Dream of Wings (Thesis)** | Developer, Experience Designer

- Solo designed and developed a bird-like motion capture VR flying experience that aims at a dreamy and intuitive feeling.
- Developed a simplified aerodynamics model to simulate bird flying. Designed intuitive gestures that prevent dizziness in VR.
- Presented at ITP Thesis Week 2017. Exhibited in ITP Spring Show 2017. Featured by Oktana as one of the three projects.
- Tools: Unity (C#), Kinect (motion capture), Oculus Rift, p5.js.

#### <u>A Proper Haunting</u> | Game Developer

- In a team of five, created a point-and-click narrative puzzle game about a ghost trying to spook a family out of his house.
- Lead game developer for user interface (UI), game scripts and functions. Participated in narrative design and visual design.
- Exhibited in 2016 NYU Game Center Student Show.
- Tools: Adventure Game Studio, Photoshop.

#### **BoomChaCha** | Game Developer, Game Designer, Composer

- In a team of three, created a collaborative music game played by Arduino-based custom controllers.
- · Lead game developer for musical timing, interactive tutorial, user interface (UI), animation, mechanics, serial data, etc. Participated in game design, composed background music, fabricated wand controller.
- Top 3 of "Innovative Game Design" in CHI 2016 Student Game Competition. Paper accepted by ACM CHI 2016 (the top conference for human-computer interaction).
- Tools: Processing (Java), object-oriented design (OOD), Photoshop, GarageBand, laser cutter.

### 06.2016 - 05.2017

## 03.2016 - 05.2016

02.2017 - 05.2017

#### 11.2015 - 12.2015

## 10.2014 - 07.2015

08.2015 - 05.2017

09.2010 - 06.2014