

# Han Wang

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## EDUCATION

**The University of North Carolina at Chapel Hill, Chapel Hill, NC**

August 2016 – May 2020

*B.S. in Computer Science, B.A. in Mathematics; Minor in Neuroscience*

- Major GPA: **3.8/4.0** in Computer Science
- Graduating with **Honors** in Computer Science
- Relevant Courses: Modern Web Programming, Files and Database, Software Engineering Laboratory, Data Structure

### Research Publication:

- Full conference paper: **H. Wang**, M. Mostapha, S. Jing, H. Hazlett, M. Graves, J. Hong, M. Styner. *The Application of Convolutional Neural Networks for Subcortical Structure Segmentation.*
- Paper in preparation: A. Testen, M.J. Gastinger, **H. Wang**, R. Kim, K.J. Reissner. *Mechanism for The Effects of Cocaine Self-administration on Astrocytes Revealed by Custom Filament-based Structural Analysis.*

## WORK EXPERIENCE

**Front-End Developer, Alibaba Group Headquarters**, Hangzhou, China

June 2019 – August 2019

- Individually developed the index page of a front-end of the Alibaba research paper websites
- Implemented functions that allow users to interact with database, such as uploading papers and applying for rewards
- Contributed to the design of the website user interface
- Advanced the functionality and usability of the admin management system for the Strategy and Relations Department

**Student Researcher, Neuro Image Research and Analysis Laboratories**, UNC, Chapel Hill, NC

August 2018 – May 2019

- Developed raw data processing scripts to improve image feeding efficiency into the Convolutional Neural Networks
- Increased the limited training data by 200% using the symmetric nature of the human brain
- Acquired the model which can segment 12-24 months old infants' subcortical structures with 80% accuracy or higher

**Research Assistant, Reissner Lab**, UNC, Chapel Hill, NC

April 2018 – Present

- Analyzed the morphology of astrocytes from rats, with a focus on cocaine's influence by investigating the mutation of the types of branching nodes before cocaine consumption, during cocaine consumption, and after cocaine withdrawal
- Streamlined the automated process of collecting astrocytes' data and generating analysis reports

**Front-End Developer, CPM Continuous Precision Medicine**, Durham, NC

March 2018 - August 2018

- Designed and developed the portal website for doctors to manage pain-killer prescription
- Co-developed of the Android app for patients to report their medication-taking behavior

## LEADERSHIP & EXTRACURRICULARS

**Teaching Assistant, UNC Department of Computer Science**, Chapel Hill, NC

January 2020 - present

- Hosted 7 hours of office hour every week for the course Mathematics for Image Computing
- Helped students with homework questions and programming in Matlab

**Learning Assistant, Council on International Education Exchange (CIEE)**, Nanjing, China

June 2017 – August 2017

- Coordinated off-campus activities for Rice University students to learn Nanjing history and help local middle-school students to learn English

**Team Member, UNC BEAM Club**, Chapel Hill, NC

2016 - 2017

- Designed electrical devices used on the weather balloon, including GPS and mini camera

**Founder, No.29 High School Physics Team**, Nanjing, China

2015 - 2016

- Led the first Physics team in Nanjing No. 29 High School, which won the third place in Jiang Su Youth Physics Tournament

## SKILLS

**Technical skills:** Most experienced with HTML, CSS, Less, Sass, JavaScript, jQuery, React, Node.js, Bootstrap, Java, Sketch, Figma, Adobe XD. Some experience with MySQL, Matlab, PHP, C++, Python, Linux

**Language:** Mandarin (native speaker), English    **Interests:** Piano, Illustration