Shichu Zhu

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Education

- **University of Illinois at Urbana-Champaign** — **Urbana, IL, US**
  Computer Science, Professional MS — *August 2018–Present*
- **University of Illinois at Urbana-Champaign** — **Urbana, IL, US**
  Atmospheric Science, MS — *August 2014–August 2018*
  G.P.A. Overall 3.66/4.0
- **Peking University** — **Beijing, China**
  Atmospheric and Oceanic Sciences, BS — *September 2010–July 2014*
  School of Physics, G.P.A. Major 3.70/4.0, Overall 3.52/4.0

Experience

- **University of Illinois** — **Urbana, IL, USA**
  Teaching Assistant, Dept of Computer Science — *August 2018–Present*
  CS 411 Database Systems, Design homework questions (SQL query, ER diagrams), present tutorial lecture on web programming upon DBMS and hold office hours.
- *Summer Intern, DataSpread Group:* *dataspread.github.io* — *Summer 2018*
  Designed and developed the navigation browsing component, integrating front-end design and back-end database algorithm support. Achievements included augmenting ZKSpreadSheet's formula execution engine and using complex data structures such as B-Tree. Mainly developed in java/javascript with the Spring framework.
- *Teaching Assistant, Dept of Atmospheric Science* — *2016–2017*
  ATMS 301 Thermodynamics, ATMS 201 General Physical Meteorology, Duties included grading homework, writing quiz questions and giving mini lectures explaining homework problems.
- *Research Assistant, Dept of Atmospheric Science* — *2014–2016*
  UIOPS Improved the theoretical mechanism of the ice clouds formation by analyzing airborne observation dataset. Technically involved developing of numerical computation and image processing in MATLAB, as well as data analysis and visualization using Python (Scipy/Pandas/Matplotlib).
- **California Institute of Technology** — **Pasadena, CA, USA**
  Visiting Undergraduate Researcher, Dept of Planetary Science — *Summer 2013*
  Numerical simulation of the weather layer of Jupiter's atmosphere using GFDL's shallow water model.
- **Peking University** — **Beijing, China**
  Undergraduate Researcher, Dept of Atmospheric and Oceanic Sciences — *2013–2014*
  A survey and comparison of existing numerical advection schemes in solving 1-D advection equation.

Projects

- *Course project, CS 425 Distributed System* — *Fall 2017*
  Source on demand Implemented a gossip-style failure detector for a distributed system connected by arbitrary network topology. Programming techniques included building a utility RPC module with socket and decorator in Python.
- *Course project, CS 225 Data Structures Honor Section* — *Fall 2017*
  Source on demand A simple terminal text adventure game built under functional programming paradigm in Clojure.

Programming Languages

- **Proficient in:** C++, Python, Java.
- **Familiar with:** Golang, FORTRAN, MATLAB, SQL, Haskell, Clojure, javascript, LaTeX.