

# XUE ZOU

COMPUTER SCIENCE & MATHEMATICS MAJOR

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[github.com/xuezzou](https://github.com/xuezzou)

## EDUCATION

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### Vanderbilt University

Nashville, TN (2017–2021)

- Bachelor of Science in Computer Science & Mathematics, Music Minor
- GPA: 4.0/4.0
- Relevant Coursework: Data Structure and Software Design, Intermediate Software Design, Algorithms, Web-based Architecture, Introduction to Visualization

### Shenzhen Middle School

Shenzhen, China (2014–2017)

- GPA: 4.28/4.31
- Honors: Merit Student & Xunxian Scholarship, Outstanding Community Service Award

## SKILLS

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**Technical Skills** C++, Python, Java, Javascript, Web Development(React, Node.js, Express), MongoDB, D3.js

**Languages** English, Japanese, Traditional/Simplified Chinese

**Art Technology** Adobe Photoshop, Illustrator, Premiere Pro, After Effects

## WORK EXPERIENCE

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### Institute for Software Integrated Systems

Software Engineer Intern

Nashville, TN (Summer 2018)

- Developed auto-scribing program using Google Cloud Platform, AWS and IBM Watson speech to text services
- Designed web interface using HTML5, CSS, JavaScript and Web MediaDevices APIs;
- Explored the possibility of building a medical information extractor from scratch using NLTK platform and Stanford NLP tools as well as CCG practices;

### Vanderbilt University

Undergraduate Teaching Assistant for *Data Structure and Software Design*

Nashville, TN (Aug 2018 - Present)

- Guided students to solve computer science related problems with consistent positive evaluations
- Held weekly 4 hour office hours and provided excellent tutoring
- Evaluated students projects and assignments with detailed and thoughtful feedbacks

## PROJECTS

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### Solitaire Game Web App

(Aug-Dec 2018)

- Developed a web-based Klondike Solitaire SPA app using *MongoDB* & *Mongoose* for data persistence, popular js framework such as *React* for client side, *Redis* for caching, *Node.js* and *Express* for the server
- Built based on *RESTful* APIs; Explored the possibilities of using *GraphQL* over *REST*
- Won the *most attractive application* voted by other students

### Exploring UFO Sightings

(Nov-Dec 2018)

- Designed and implemented visulization and interaction of over 80,000 data items across different attributes using *d3.js* library; Conducted analysis of trend and patterns across time, geo, shape and duration

### Expression Tree of Mathematical Operations

(Mar-Apr 2018)

- Developed an object-oriented expression tree evaluator program applying various design patterns
- Conducted commonality/variability analysis to determine stable interfaces and points of variability
- Illustrated how OO frameworks can be combined with the generic programming features of C++ and STL

## VOLUNTEER EXPERIENCE & INTERESTS

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### Mentor & Instructor, Code Ignite

(Aug 2017 - Present)

- Taught basic knowledge about coding; inspired local minority high school student to STEM-related fields

**Activities** VandyFOSS (Vanderbilt Free & Open Source Society), Concert Choir, Varda Chamber Music Club, Women Basketball Team, Nova Magazine

**Interests** Piano, Basketball, Literature, Travel, Cooking