

# Wenqi He

(+1)470-343-5207, hewenqi96@gmail.com  
github.com/galmungral

## EXPERIENCE

---

### National Center for Supercomputing Applications (NCSA), Urbana, IL, US

*Software Engineer, Graduate Research Assistant @ Visual Analytics Group*

2022/08 – Present

- Responsible for the full-stack development and deployment of BiteMap. Next.js, PostgreSQL, Docker, OpenStack
- Participated in the front-end maintenance and development of PhyloDiver. Angular, Cypress, GitHub Actions

### Gllue Software, Shanghai, China

*Front-end Software Engineer*

2020/11 – 2022/03

- Participated in the maintenance of a UI builder for an ATS application. TypeScript, RxJS, Rollup, Lerna, Husky
- Responsible for multiple web applications and WeChat mini-programs. React, Taro, ECharts, Redux, SWR, Vite
- Developed and published a form engine, a canvas-based UI framework and a secure stream player. GitLab CI, npm
- Vue, TroopJS, webpack, Parcel, Jest, ESLint, TypeDoc, Puppeteer, Docker, Kubernetes, ArgoCD, Confluence

### Étude LLC, Atlanta, GA, US

*Software Engineer*

2019/09 – 2020/03

- Participated in the early development of an NLP-powered PDF reader application. Electron, webpack (runtime)
- Implemented text-related features such as table-of-contents parsing, fuzzy searching and text highlighting.

## EDUCATION

---

### University of Illinois Urbana-Champaign, Urbana-Champaign, IL, US

*Master of Computer Science*

2022/08 - Present

GPA: 4.00

Natural Language Processing, Information Retrieval, Advanced Compiler Construction (LLVM), Programming Languages  
Interactive Computer Graphics (OpenGL/WebGL), Computational Photography

### Georgia Institute of Technology, Atlanta, GA, US

*Bachelor of Science in Computer Science, Minor in Physics*

2015/08 - 2019/12

GPA: 3.97 (major: 4.00, minor: 3.80)

Computer Organization & Programming, Computer Systems & Networks, Database Systems (SQL), Information Security  
Data Structures and Algorithms, Design and Analysis of Algorithms, Numerical Analysis (MATLAB), Computer Simulation

## PROJECTS

---

<code>/rasterizer: a simple software renderer</code>	C++, WebAssembly, Emscripten 2022/09
<code>/particle-simulation: a simple particle collision simulation</code>	Rust, WebAssembly, WebGL 2022/11
<code>/telescope: a libuv-based split SOCKS proxy</code>	C, Python 2021/04
<code>/hanbun-lang: a programming language inspired by Classical Chinese</code>	PureScript 2021/05
<code>/sketchpad: a toy compiler for a hypothetical architecture</code>	TypeScript 2022/04
<code>/michelangelo: a simple canvas-based UI framework</code>	TypeScript 2022/05
<code>/replay: a modern front-end framework and a bundler</code>	TypeScript 2020/05
<code>/react-teletype: a remote (server-side) React renderer</code>	TypeScript 2021/05

Scheme, Common Lisp, OCaml, Haskell, Java, Python, MATLAB, NumPy, SciPy, OpenCV  
HTML, SVG, D3.js, jQuery, PHP, Node.js, Express, Socket.IO, WebRTC, MySQL, MongoDB  
CSS, Sass, LESS, Tailwind CSS, styled-components, Linaria, Bootstrap, Ant Design, PrimeNG, MUI