

Mutian “Josh” LIU
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Personal Website: liumutian.me
Github: josh-mutian

EDUCATION

THE UNIVERSITY OF CHICAGO

Bachelor of Arts in Statistics and Bachelor of Science in Computer Science

Cumulative GPA: 3.95 / 4.00 (as of September 2016)

Dean's List in 2014, 2015, and 2016; Phi Beta Kappa (invited in junior year).

Chicago, IL

Expected, June 2017

TECHNOLOGICAL SKILLS

Programming: C • Java • Python • R

Web Development: PHP • JavaScript • HTML • CSS

Audio, Video, and Design: Adobe Audition, Photoshop • Apple Final Cut Pro X, Motion • LaTeX • Axure

EXPERIENCE

ARGONNE NATIONAL LABORATORY

Research Aide

Argonne, IL

July 2016-present

- Re-structured and re-implemented an old program in Python with readable and maintainable code.
- Generalized the original implementation so that it can run on any input structures with any configurations.
- Vectorized multiple calculations and improved the algorithm's efficiency dramatically.
- Redesigned the collision removal algorithm based on “minimum image convention” and decreased the number of atoms to consider by 90%.
- Standardized the input file as JSON and gave users a clean and convenient way to adjusting parameters and batch processing different combination of parameters.

FLEX.IO

Full Stack Developer

Chicago, IL

November 2015-present

- Redesigned the UI of the website for forest preservation NGO “GreenAgain” and implemented accordingly.
- Researched on online payment API's and implemented Braintree on internal test server.
- Currently working on migrating the whole website onto the Django framework.

MICROSOFT (CHINA)

China National Petroleum Corporation Project Team Intern

Beijing, China

June 2015-July 2015

- Analyzed client's needs with the development team and finalized designs for the new web-app function.
- Prototyped two sets of UI's of the new function with Axure and presented to the client and the team.

THE UNIVERSITY OF CHICAGO, OFFICE OF COLLEGE ADMISSIONS

China Mainland Outreach Intern

Chicago, IL

November 2013-June 2015

- For two consecutive years, in charge of the video portion of the newly admitted student event in China. Individually did the interview and voice over then finished up editing the video.
- Redesigned the school's official Weibo (the Chinese version of Twitter) page and update information.
- Researched on rival schools' outreach performance in China, reported on the university's standing in China mainland outreach and proposed strategic advice.

OTHERS

Languages: English - fluent • Mandarin - fluent • Japanese - conversational, JLPT level N1 (highest level)

Interests: choral music • Japanese literature • baking