Zizhou Sang

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EDUCATION

- **University of Illinois at Urbana-Champaign** — *Champaign, IL*
  Master of Science in Information Management — *Sep 2019 – Present*
  - GPA: 3.9 / 4.0 | All 4.0 except two required non-programming courses, projects well-recognized by instructors.
- **Nanjing University** — *Nanjing, China*
  Bachelor of Economics in Financial Engineering — *Sep 2016 – Jun 2019*
  - GPA: Overall: 4.3 / 5.0 | Major: 4.4 / 5.0 | Senior Major: 4.8 / 5.0 *(top ranked)*
  - Transferred and completed most courses in two years, projects received exceptional remarks from professors.

SKILLS

- **Languages**: Python, JavaScript, Dart, PostgreSQL, Java, C++, Matlab, R, SAS, Linux, Git, LaTeX
- **Courses**: Algorithm Design and Analysis, Database Systems, Machine Learning, Data Mining
- **Currently Learning**: React/Redux, Node.js   • **Softwares:** Adobe Creative Cloud, Tableau

EXPERIENCES

- **Amino Capital** — *Palo Alto, CA*
  Web Developer Intern | Advised by Dr.Sue Xu (Managing Partner, Stanford PostDoc) — *May 2020 – Sep 2020*
  - Self-learned Flutter with Firebase development framework in a week, then independently implemented a simplified version of company's current CRM system for testing and modification purposes in short time.
  - Proactively solved assorted technical problems, including web-scraping TikTok data for analytics, writing video crawlers, bypassing TikTok livestream restrictions etc. Performance spoke highly of by supervisors.

PROJECTS

- **King Othello: An Original Variation** | GITHUB · SLIDES · TALK — *Champaign, IL*
  Advised by Mr.John Weible — *Nov 2020 – Dec 2020*
  - Implemented from scratch to build an Othello program with AI based on Minimax and GUI written in PyQt5.

- ***Age of Empires II* Resource Gathering Optimizer** | GITHUB · SLIDES · TALK — *Champaign, IL*
  Advised by Mr.John Weible — *Nov 2020 – Dec 2020*
  - Modeled with game details and implemented an original simulator program to derive the optimal villager strategy to gather arbitrary amount of resources in game of *AoE II*, and yielded convincing real-world results.

- **LaTeX for LaTeX's Sake: My LaTeX Cookbook** | BOOK — *Nanjing, China*
  Self-Engaged — *Dec 2018 – Dec 2018*
  - Organized LaTeX commands and tricks in a systematic way, covered topics include code environments, macros, formulas, stickers etc. Similar book summary done in areas like algorithms and math for better understanding.

- **Accumulator Pricing** | PAPER — *Nanjing, China*
  Advised by Prof.Xuewei Yang (Joint UIUC PhD, author of two JFE papers) — *Sep 2017 – Oct 2017*
  - Studied theoretical papers and implemented accumulator pricing in both analytical and Monte Carlo methods.
  - Single work done in seven days by Matlab first-timer. Works exceeded Prof.Yang's expectation by receiving *'Few of you could have done this, even if you were provided with the formulas'* public remark during presentation.

RESEARCHES

- **Solidity in a Turbulent Flow: Social Network Analysis of Aristocrats in Jin** | SLIDES — *Champaign, IL*
  Co-authored with Wenyi Shang (UIUC PhD Student) — *Apr 2020 – May 2020*
  - Proposed ideas of preferential attachment and ERGM simulation as well as responsible for all coding parts.
  - Paper is accepted by the *Journal of Historical Network Research* and now working on editor's final reviews.

- **Routing Optimization for High Speed Photon State-Channel Architecture** | PAPER — *Nanjing, China*
  Advised by Prof.Xiaowei Ding (Stanford PhD) — *Jul 2018 – Oct 2018*
  - Attempted to improve the off-chain transfer throughput of Photon network in blockchain project SmartMesh.
  - Simulated Photon network on Matlab, applied fmincon for optimization and served as bilingual coordinator.
  - Paper submitted to *China Computer Federation National Conference on Blockchain Technologies (CCF NCBT) 2018*.