

# Anna Fang

annadfang@gmail.com

(317) 523-4098

## Education

---

**Carnegie Mellon University**, School of Computer Science

Aug 2020 - Present

*PhD in Human-Computer Interaction*

*GPA: 4.0/4.0*

**Cornell University**, College of Engineering

Aug 2015 - May 2019

*B.S. Computer Science, Magna Cum Laude*

*GPA: 3.82/4.0*

## Research & Teaching Experience

---

**Carnegie Mellon University, Graduate Research Assistant**

Aug 2020 - Present

*Under Haiyi Zhu in Social Computing/HCI*

- My research studies how the mechanisms and algorithms of online communities can enable both personal well-being (e.g. mental health) and community well-being (e.g. productive discourse). My work is in the intersection of applied artificial intelligence, network science, and social science.

**Cornell University Computer Science, Undergraduate Researcher**

Aug 2017 - Dec 2018

*Under Kilian Weinberger in Machine Learning*

- Studied question-answering models with deep learning on the Stanford Question Answering Dataset  
- Automated conference paper assignments according to similarity measurements (+ other constraints) for AAAI 2018

**Cornell University Computer Science, Head Teaching Assistant**

Aug 2016 - May 2019

*CS3110 Functional Programming & CS1110 Introduction to Python*

- Spring 2019, Fall 2018: Head TA for CS3110  
- Spring 2018, Fall 2017, Spring 2017, Fall 2016: Undergrad TA for CS3110 and CS1110

**National Science Foundation, Research Intern**

May 2016 - Aug 2016

*Under Zina Ben-Miled in Data Analytics*

- Studied the effects of user sentiment on news propagation across Twitter utilizing sentiment analysis, data analytics, and statistical modeling

**Indiana University Purdue University Indianapolis, Research Assistant**

May 2014 - Aug 2014

*Under Arjan Durrezi in Trust Systems and Social Networks*

- Utilized data mining and analysis of Twitter data to model trust in online communities based on balance theory and status theory

## Publications

---

(\*) denotes equal contribution

**Fang, A., Zhu, H. (2022). Exploring the Relationship Between Community Generated Rules and Discussion Structure: A Case of Reddit. Under Submission.**

**Fang, A.\*, Liu, Y.\*, Kraut, R., Moriarty, G., Firman, C., Zhu, H. (2022). Agent-based Simulation of Real-Time Algorithmic Matching for Online Mental Health Communities. Under Submission.**

**Fang, A. & Zhu, H. (2022). Matching for Peer Support: Exploring Algorithmic Matching for Online Mental Health Communities. In Proceedings of the ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW '22).**

**Fang, A. & Ben-Miled, Z. (2017). Does Bad News Spread Faster?. IEEE International Conference on Computing, Networking, and Communications.**

**Ruan, Y., Alfantoukh, L., Fang, A., & Durresi, A. (2014). Exploring Trust Propagation Behaviors in Online Communities. International Conference on Network-based Information Systems 2014.**

## Industry Experience

---

**Amazon, Software Development Engineer I** Aug 2019 - Aug 2020  
*eCommerce Platform - Seattle, WA*

- Integrated third-party software Vertex into Amazon's existing pricing platform
- Used Amazon RDS with MySQL to create and deploy databases containing updated pricing regulations in Amazon marketplaces worldwide

**Amazon, Software Engineer Intern** May 2018 - Aug 2018  
*Personalization Team, Recommender Systems - Seattle, WA*

- Created rule-based recommendation model for non-consumable products in "Buy It Again"
- Designed & implemented automated system that generated >30% increased coverage in sorting products into "browse nodes", a categorization process that underlies Amazon recommenders

**The Aerospace Corporation, Software Engineer Intern** June 2017 - Aug 2017  
*Launch Vehicles Team for SpaceX - El Segundo, CA*

- Designed and implemented visualization tools to analyze real-time telemetry data in SpaceX's control room

## Awards

---

**Fellowship in Digital Health, Center for Machine Learning & Health at CMU.** June 2022 - June 2023  

- Covers tuition, stipend, and \$3000 research expenses.

**Cornell University, Computer Science Course Staff Award** May 2019, May 2018, Dec 2017

**Cornell University, Engineering Dean's List** Fall 2017 - Spring 2019, Spring 2016 - Fall 2016

## Invited Talks

---

**PBS National Meeting, Invited Speaker** May 2018  

- Invited to speak about algorithmic bias and show short film about AI ethics at the 2018 National Meeting Conference in New Orleans
- PBS published my short film to PBS Learning Media for Teachers

**American Society for Engineering Education, Invited Speaker** April 2018  

- Invited to speak on current issues in AI ethics and introducing tech ethics in CS undergraduate education to professors from various universities at the ASEE St. Lawrence Conference

## Professional Service

---

Reviewer for CHI '22, CSCW '22, CHI '21, CSCW '21