Yuren (Rock) Pang

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RESEARCH INTERESTS

Human-Computer Interaction, Responsible AI, Information Visualization, Computational Social Science

EDUCATION

10/2020 - Present	University of Washington	Seattle, WA
	Ph.D. in Computer Science & Engineering	
	Advisors: Dr. Katharina Reinecke, Dr. René Just	GPA: 3.81
08/2016 - 05/2020	Macalester College	St. Paul, MN
	B.A. in Computer Science, Applied Math & Statistics	
	Minor in Political Science (*Summa Cum Laude*)	
	Advisor: Dr. Shilad Sen	GPA: 3.94

RESEARCH EXPERIENCE

Graduate Researcher, *University of Washington*   10/2020 - Present
Project 1: Scaffolding Preregistrations to Automatically Generate Analysis Code and Method Descriptions
Advisors: Dr. Katharina Reinecke and Dr. René Just
- Investigated how HCI researchers preregister their studies based on 2,184 CHI papers from 2018-2021
- Developed Apéritif, a chrome extension that automates preregistration and statistical analysis
- Conducted 17 user evaluation and qualitative interviews to solicit feedback for Apéritif

Project 2: Large-scale Collection of Unintended Consequences of Technology (ongoing)
Advisors: Dr. Katharina Reinecke and Dr. René Just
- Fine-tune a BERT-based QA model to extract potential consequences of AI systems from the wild
- Design novel interface that uses crowdsourcing to brainstorm consequences from a diverse population
- Scaffold qualitative data collection, foster online creativity, and automate qualitative data analysis

Project 3: Communicating Artificial Intelligence (AI) to the Public on Twitter (ongoing)
Advisor: Dr. Katharina Reinecke
- Examine how researchers communicate AI advances to the public on Twitter using the scientific dialogue models and large-scale social network analysis based on 2 million tweets

Research Assistant, *Macalester College*   05/2019 - 05/2020
Project 1: Cartograph: Unlocking Thematic Cartography Through Semantic Enhancement
Advisor: Dr. Shilad Sen
- Developed a web-based visual interactive system to visualize non-spatial data as geographical maps to reveal semantic relatedness using Wikipedia corpora
- Constructed a joint algorithm of embedding, clustering, and labeling to encourage more homogeneous clusters and explain semantic neighbors
- Conducted 608 user evaluations on clustering labels via Amazon Mechanical Turks

Project 2: HCI Capstone Project
Advisor: Dr. Lauren Milne
- Designed a web Interface to help students with ADHD focus on extensive readings; Conducted 30 user interviews to iteratively improve prototypes

Software Engineer Intern, *Sezzle Inc., Minneapolis, MN* 05/2020 - 09/2020
- Developed an event streaming pipeline for internal data analytics using MySQL, Apache Kafka, Go
- The infrastructure captures 2.5 million active user event logs for internal UI/UX research and was deployed at the end of my internship

MANUSCRIPTS

1. **Yuren Pang**, Katharina Reinecke, René Just, *Apéritif: Scaffolding Preregistrations to Automatically Generate Analysis Code and Method Descriptions*, Human Factors in Computing Systems (CHI), 2022 (Revise & Resubmit)
2. **Yuren Pang**, Tal August, Priyanka Rao, Katharina Reinecke, *Communicating Artificial Intelligence to the Public on Twitter*, Proceedings of ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW), 2022 (in preparation)

TEACHING EXPERIENCE

Teaching Assistant, University of Washington 01/2022-03/2022
  CSE-440 (Intro to HCI: User Interface Design, Prototyping, and Evaluation)
Teaching Assistant, Macalester College 09/2017 - 05/2020
  COMP-123 (Core Concepts in Computer Science, Fall 2017 and Spring 2018); COMP-128 (Data Structure, Spring 2020), MATH-279 (Discrete Math, Fall 2018), COMP-365 (Computational Linear Algebra, Spring 2019), STATS-494 (Correlated Data, Fall 2019)

SERVICE

10/2021	UW CSE Colloquium	Organizer + Presenter
10/2021	UW Pre-Application Mentoring Service (PAMS)	Mentor
09/2021	UW CSE 2021 New Grad Mentor Group	Mentor
09/2021	UW CSE TGIF	Organizer

AWARDS

09/2020	**CSE Educators' Endowed Fellowship**	University of Washington
05/2020	**Camp Endowed Prize in Mathematics**	Macalester
	The only winner in the CS department at Macalester	
06/2019	**Academic All-Conference in Track & Field**	Minnesota
04/2019	**Best Algorithms Design Award** in the American Statistical	Minnesota
	Association (ASA) DataFest Competition, a data science hackathon	
	One winner out of 16 teams	
05/2018	**Chuck Green Civic Engagement Fellowship**	Macalester
	25% acceptance rate, a recipient with $5,500	
04/2018	**Charles W. Ferguson Endowed Prize in Public Speaking**	Macalester
04/2017	**Lowell Thomas Endowed Prizes in Public Speaking**	Macalester
04/2017	**Best Use of External Data Award in the ASA DataFest Competition**	Minnesota
	One winner out of 13 teams	
05/2016	**Kofi Annan International Scholarship**	Macalester
	A four-year full scholarship of $116,072	
2016-2019	**Dean's List** every semester	Macalester

SKILLS AND COURSEWORK

Programming: Python, SQL, R, JavaScript, HTML, CSS, Java, C, C++, Perl, etc
Software/Frameworks: Spark (RDD), Gephi, Tensorflow, PyTorch, hugging face, Node.JS, etc
Data Analysis: Python (scikit-learn, numpy, nltk, spaCy, pandas), R (tidyverse), SQL, D3, Vega-Lite
Skills: Data Analysis, UI/UX Design, Qualitative Research, In-lab & Online Experiment Design
Languages: Fluent in English, Native in Chinese
Related Coursework: Interactive Data Analysis Systems, Machine Learning for Big Data, Quantitative
Research Methods, Network Analysis, Correlated Data, Computational Linear Algebra, Internet Computing