

# Longqi Yang

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## RESEARCH INTERESTS

Intelligent information systems; Personalization; Recommender systems; Machine learning for behavior modeling

## EDUCATION

CORNELL UNIVERSITY | PH.D. IN COMPUTER SCIENCE

9/2014 - 5/2019 (Expected) | New York, NY

Advisor: Prof. Deborah Estrin

Committee: Prof. Mor Naaman, Prof. Serge Belongie, Prof. Nicola Dell, and Prof. Claire Cardie

ZHEJIANG UNIVERSITY | B.ENG. IN INFORMATION & COMMUNICATION ENGINEERING

9/2010 - 6/2014 | Hangzhou, China

Graduated with Honor (Ranking: 1/199); Minor in Advanced Class of Eng. Edu., Chu Kochen Honors College

## RESEARCH EXPERIENCE

CORNELL TECH | SMALL DATA LAB

9/2014 - Present | New York, NY

*Research Assistant* with Prof. Deborah Estrin.

Research in behavior modeling, personalization, and recommender systems.

CORNELL TECH | CONNECTED EXPERIENCES LAB

9/2015 - Present | New York, NY

*Oath Ph.D. fellow* with Prof. Deborah Estrin, Prof. Mor Naaman, and Prof. Serge Belongie.

Research in immersive recommendation systems, and modeling and interacting with audio content.

ADOBE RESEARCH | CREATIVE INTELLIGENCE LAB

9/2016 - 8/2017 | New York, NY

*University collaborator and research intern* with Dr. Walter Chang, Dr. Chen Fang, Dr. Hailin Jin, and Dr. Matt Hoffman.

Leveraged application usage traces to characterize user skills; benchmarked creative knowledge extraction.

ADOBE RESEARCH | CREATIVE INTELLIGENCE LAB

5/2016 - 8/2016 | San Jose, CA

*Research intern* with Dr. Chen Fang, Dr. Hailin Jin, and Dr. Matt Hoffman.

Designed and developed cross-platform recommendation systems for web and software users.

MICROSOFT RESEARCH ASIA | MOBILE AND SENSING SYSTEMS GROUP

12/2013 - 3/2014 | Beijing, China

*Research intern* with Dr. Jacky Shen.

Designed and developed a swiping-based input method for Android.

UNIVERSITY OF CALIFORNIA, LOS ANGELES | NETWORKED & EMBEDDED SYSTEMS LAB

7/2013 - 9/2013 | Los Angeles, CA

*Research intern* with Prof. Mani Srivastava.

Investigated user privacy leakage from smart home sensor data.

## PUBLICATIONS

### *Peer-reviewed journals:*

- [3] Characterizing User Skills from Application Usage Traces with Hierarchical Attention Recurrent Networks  
*Longqi Yang, Chen Fang, Hailin Jin, Matthew D. Hoffman, Deborah Estrin*  
**TIST** - *ACM Transactions on Intelligent Systems and Technology*, 2018
- [2] Yum-me: A Personalized Nutrient-based Meal Recommender System  
*Longqi Yang, Cheng-Kang Hsieh, Hongjian Yang, JP Pollak, Nicola Dell, Serge Belongie, Deborah Estrin*  
**TOIS** - *ACM Transactions on Information Systems*, 2017
- [1] Leveraging Multi-Modal Sensing for Mobile Health: a Case Review in Chronic Pain  
*Min Aung, Faisal Alquaddoomi, Cheng-Kang Hsieh, Mashfiqui Rabbi, Longqi Yang, JP Pollak, Deborah Estrin, Tanzeem Choudhury*  
**J-STSP** - *IEEE Journal of Selected Topics in Signal Processing*, 2016.

### *Peer-reviewed conferences:*

- [12] How Intention Informed Recommendations Modulate Choices: A Field Study of Spoken Word Content  
*Longqi Yang, Michael Sobolev, Yu Wang, Jenny Chen, Drew Dunne, Christina Tsangouri, Nicola Dell, Mor Naaman, Deborah Estrin*  
*Under review*
- [11] More than Just Words: Modeling Non-textual Characteristics of Podcasts  
*Longqi Yang, Yu Wang, Drew Dunne, Michael Sobolev, Mor Naaman, Deborah Estrin*  
**WSDM** - *12th ACM International Conference on Web Search and Data Mining*, 2019
- [10] Unbiased Offline Recommender Evaluation for Missing-Not-At-Random Implicit Feedback  
*Longqi Yang, Yin Cui, Yuan Xuan, Chenyang Wang, Serge Belongie, Deborah Estrin*  
**Recsys** - *12th ACM Conference on Recommender Systems*, 2018
- [9] Understanding User Interactions with Podcast Recommendations Delivered Via Voice  
*Longqi Yang, Michael Sobolev, Christina Tsangouri, Deborah Estrin*  
**Recsys** - *12th ACM Conference on Recommender Systems*, 2018
- [8] Exploring Recommendations Under User-Controlled Data Filtering  
*Hongyi Wen, Longqi Yang, Michael Sobolev, Deborah Estrin*  
**Recsys** - *12th ACM Conference on Recommender Systems*, 2018
- [7] OpenRec: A Modular Framework for Extensible and Adaptable Recommendation Algorithms  
*Longqi Yang, Eugene Bagdasaryan, Joshua Gruenstein, Cheng-Kang Hsieh, Deborah Estrin*  
**WSDM** - *11th ACM International Conference on Web Search and Data Mining*, 2018
- [6] Personalizing Software and Web Services by Integrating Unstructured Application Usage Traces  
*Longqi Yang, Chen Fang, Hailin Jin, Matthew D. Hoffman, Deborah Estrin*  
**WWW** - *25th International Conference on World Wide Web*, 2017
- [5] Collaborative Metric Learning  
*Cheng-Kang Hsieh, Longqi Yang, Yin Cui, Tsung-Yi Lin, Serge Belongie, Deborah Estrin*  
**WWW** - *25th International Conference on World Wide Web*, 2017
- [4] Immersive Recommendation: News and Event Recommendations Using Personal Digital Traces  
*Cheng-Kang Hsieh, Longqi Yang, Honghao Wei, Mor Naaman, Deborah Estrin*  
**WWW** - *24th International Conference on World Wide Web*, 2016
- [3] YADL: Your Activities of Daily Living  
*Longqi Yang, Diana Freed, Alex Wu, Judy Wu, John P. Pollak, Deborah Estrin*  
**PervasiveHealth** - *10th International Conference on Pervasive Computing Technologies for Healthcare*, 2016
- [2] PlateClick: Bootstrapping Food Preferences Through an Adaptive Visual Interface  
*Longqi Yang, Yin Cui, Fan Zhang, John P. Pollak, Serge Belongie, Deborah Estrin*  
**CIKM** - *24th ACM International Conference on Information and Knowledge Management*, 2015

- [1] Inferring Occupancy from Opportunistically Available Sensor Data  
Longqi Yang, Kevin Ting, Mani B. Srivastava  
**Percom** - 12th IEEE International Conference on Pervasive Computing and Communications, 2014

**Peer-reviewed workshops and demos:**

- [2] GroupLink: Group Event Recommendations Using Personal Digital Traces  
Honghao Wei, Cheng-Kang Hsieh, Longqi Yang, Deborah Estrin  
**CSCW** - 19th ACM Conference on Computer Supported Cooperative Work and Social Computing, 2016
- [1] Beyond Classification: Latent User Interests Profiling from Visual Contents Analysis  
Longqi Yang, Cheng-Kang Hsieh, Deborah Estrin  
**ICDM** - IEEE International Conference on Data Mining Workshop, 2015

**Patents:**

- [2] Personalizing User Experiences With Electronic Content Based on User Representations Learned from Application Usage Data (Publication: 6/21/2018)  
Matthew Hoffman, Longqi Yang, Hailin Jin, Chen Fang
- [1] Recommending Software Actions to Create an Image and Recommending Images to Demonstrate the Effects of Software Actions (Publication: 5/24/2018)  
Matthew Hoffman, Longqi Yang, Hailin Jin, Chen Fang

## **LEADERSHIP & PROFESSIONAL SERVICE**

### **RECSYS 2018 TUTORIAL | CO-ORGANIZER**

10/2018 | Vancouver, Canada

Co-organized a tutorial on *Modularizing Deep Neural Network-Inspired Recommendation Algorithms*.

### **KDD 2018 WORKSHOP | CO-ORGANIZER**

8/2018 | London, UK

Co-organized a workshop on *Machine Learning and Data Mining for Podcasts (MLDM4P)* with Dr. Yu Wang (Himalaya Media), Dr. Rosie Jones (Spotify Research), and Prof. Deborah Estrin.

### **CORNELL TECH CLASS OF 2019, 2020 STUDENT ORIENTATION | INVITED PANELIST**

8/2018 | New York, NY

Invited to serve on a panel for new student orientation.

### **CORNELL TECH STUDENT RECRUITMENT | INTERVIEWER**

2/2018 | New York, NY

Volunteered to review pre-recorded interviews for computer science master program applicants.

### **BLOOMBERG DINNER WITH BOARD OF OVERSEERS | STUDENT DELEGATE**

2/2018 | New York, NY

Shared research experience with Cornell Tech board of overseers.

### **NYC MEDIA LAB ANNUAL SUMMIT WORKSHOP | ORGANIZER**

9/2017 | New York, NY

Organized a workshop on *Immersive Recommendation*.

### **FESTIVAL OF SCHOLARSHIP: EXCELLENCE IN RESEARCH | PRESENTER**

8/2017 | Ithaca, NY

Represented Ph.D. students at Cornell Tech to present research at the presidential inauguration.

### **CORNELL COMPUTER SCIENCE PH.D. VISIT DAY | CO-ORGANIZER**

3/2017 | Ithaca and New York, NY

Co-organized visit day events for prospective computer science Ph.D. students.

## INVITED TALKS AND LECTURES

### SPOTIFY RESEARCH

11/2018 | New York, NY

*Understanding and Recommending Podcast Content.*

### RECSYS 2018 TUTORIAL

10/2018 | Vancouver, Canada

*Modularizing Deep Neural Network-Inspired Recommendation Algorithms.*

### STRATA DATA CONFERENCE

9/2018 | New York, NY

*Harnessing and customizing state-of-the-art recommendation solutions with OpenRec.*

### YAHOO! RESEARCH

3/2018 | New York, NY

*Recommendation Beyond User-Item Interactions.*

### CORNELL TECH GUEST LECTURE | CS 5785 Applied Machine Learning

11/2017, 11/2016 | New York, NY

*Recommendation Systems: The Matrix and Beyond (75 min lecture).*

*Food Recommender System: Deep Learning for Food Preference Modeling (75 min lecture).*

### NYC MEDIA LAB ANNUAL SUMMIT WORKSHOP

9/2017 | New York, NY

*Deep User and Content Modeling for Personalization (90 min lecture).*

## TEACHING ASSISTANCE

CS 5785 Applied Machine Learning | New York, NY, 9/2015 - 12/2015

CS 5300 The Architecture of Large-Scale Information System | Ithaca, NY, 1/2015 - 5/2015

CS 5434 Defending Computer Networks | Ithaca, NY, 9/2014 - 12/2014

## ADVISING & MENTORING

Pargol Gheissari | M.S. Cornell Tech, 9/2018 - Present

Yasmeen Hassan | B.S. City University of New York, 9/2018 - Present

Chenyang (Kelly) Wang | M.S. Cornell Tech, 2/2018 - Present

Yuan (Tony) Xuan | M.S. Cornell Tech, 2/2018 - Present

Kriti Singh | M.S. Cornell Tech, 2/2018 - Present

Mohit Chawla | M.S. Cornell Tech, 2/2018 - Present

Amir Biran | B.S. Technion, 8/2018 - 10/2018

Drew Dunne | B.S. Cornell University, 6/2018 - 8/2018

Jenny Chen | B.S. City University of New York, 6/2018 - 8/2018

Christina Tsangouri | B.S. City University of New York, 12/2017-8/2018, now: Ph.D. New York University

Yordanos Goshu | B.S. Cornell University, 9/2017 - 5/2018, now: Goldman Sachs

Josh Gruenstein | Horace Mann School, 6/2017-8/2017, now: B.S. Massachusetts Institute of Technology

Hongjian (Thomas) Yang | M.S. Cornell Tech, 10/2015-12/2015, now: Google Inc.

Honghao Wei | B.S. Tsinghua University, 7/2015-9/2015, now: M.S. Stanford University -> Facebook Inc.