# Jiaming Qiu

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#### **EDUCATION**

Washington University in Saint Louis, Missouri.

St. Louis, MO

B.S. in Computer Science. GPA: 3.94/4.0, Summa Cum Laude.

Aug. 2018 - May 2020

PhD in Computer Science, Expected Graduation: May 2025. GPA: 4.0/4.0

Sep. 2020 – Present

Summer Scholars Program at Saint Louis University.

St. Louis, MO

Program of Study: Geographic Information System.

July 2017 – Aug. 2017

Nanjing University of Information Science & Technology, Nanjing, Jiangsu, China.

Nanjing, Jiangsu, China

B.S. in Atmospheric Science.

Sep. 2016 - June 2018

School of Honors Rank 1/44.

#### RESEARCH EXPERIENCES

#### Website Matching with applications to track the Darknet

St. Louis, MO

Washington University in St. Louis

Mentor: Professor Roch Guerin.

Feb. 2019 - Aug. 2020

- Developed a web crawler to collect data from up to 20,000 Tor hidden services over 6 months.
- Developed a web parser to identify website identities.
- Designed and built website matching model based on pairwise similarity analysis.
- Performed preliminary website tracking in the darknet.
- Ran Tor relays to monitor Tor hidden service information.
- Participated in CSE Research Experience for Undergraduate Students (REU) and presented results to the department.
- · Completed senior honors thesis, tracking Tor hidden services and onion addresses

#### Real-Time Edge Classification for Temporal Correlated Input

St. Louis, MO

Washington University in St. Louis

Mentor: Professor Roch Guerin,

 $Sep.\ 2020-Present$ 

Chenyang Lu, Ayan Chakrabarti

- Applied a Deep Q-Network (DQN) model to make optimal offloading decisions for correlated input.
- Extensively evaluated the performance of the DQN model on the ImageNet benchmark.
- Did preliminary works to extend the model to a distributed system with multiple local devices.
- Working towards evaluating the model on object detection tasks with traffic camera applications.

#### **Lowering Inter-Datacenter Network Bandwidth under Latency Constraints**

St. Louis, MO

Washington University in St. Louis

Mentor: Professor Roch Guerin.

Nov. 2020 - Present

 Participated in works that aim to lower total link bandwidth given end-to-end flow deadline budgets for the single-hop scenario with different scheduling policies.  Performed preliminary evaluations on simple network topologies for several ideas that attempt to extend the work to the multi-hop scenario.

# Hydrological responses to vegetation recovery based on water-energy coupled method in the Poyang Lake Basin.

Nanjing, Jiangsu, China Mar. 2017 – Feb.2018

Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences.

Mentor: Associate Professor Dan Zhang.

- Collected and analyzed meteorological and hydrological data to couple with hydrological model.
- Programmed a model to calculate potential evapotranspiration based on Penman formula (WMO Schema).
- Co-authored journal publication.

#### TEACHING & LEADERSHIP EXPERENCES

#### Washington University in St. Louis

St. Louis, MO

Teaching Assistant CSE 347 (Analysis of Algorithm)

Sep. 2019 – Present

- Graded weekly assignments and exams.
- Held 1.5 weekly office hours to help around 5 students with course materials, algorithm designing techniques and answer questions about homework.

Advisor of Mathematical Contest in Modeling

Jan. 2019 - May

#### Nanjing University of Information Science & Technology.

Nanjing, Jiangsu, China

Student in charge of studies for 2020 ChangWang class.

Feb. 2017 - June 2018

Nanjing, Jiangsu, China

- Took attendance and helped with homework sending and receiving.
- Answered questions about all courses materials and exam preparation for the rest of the class (43 students).

#### AWARDS AND HONORS

## Washington University in St. Louis. St. Louis, MO

• Dean's Select PhD Fellowship 2020

• Dean's List Aug. 2018 – Dec. 2019

#### Nanjing University of Information Science & Technology.

Awarded Second Prize for the 10th Knowledge Competition for College Students
 in Jiangsu Province.

• Awarded Third Prize for Beidou-Cup China Adolescents Science & Technology Invention Contest. 2018

• Special Ability Certificate for high knowledge level of humanities and social sciences. 2018

• Honorary Student Certificate for Changwang School of honors.

Awarded First Prize in the 14th Advanced Mathematics Competition for Jiangsu Provincial
 College Students (Undergraduate First Class Group).

Awarded Second Prize in the 9th National College Mathematics Competitions, Jiangsu Division.

•	Awarded Second Prize in the 15th National Competition of Extracurricular Academic	2017
	Technological Product in Jiangsu Province.	
•	Awarded Special Prize in the 15th Competition of Extracurricular Academic Technological Product in	2017
	Campus Trials.	
•	Awarded Third Prize for Band C in 2017 National English Competition for College Students.	2017
•	Awarded Third Prize in the Preliminary Round of 2017 "FLTRP Cup" English Reading Contest.	2017
•	Awarded Silver Medal for the 3rd Internet Plus College Innovation and Entrepreneurship Competition	2017
	in Nanjing University of Information Science & Technology.	
•	Certificate of Level 2, National Computer Rank Examination.	2017
•	Awarded First Prize Scholarship.	2016-2017
•	Pacemaker to Merit Student.	2016-2017
•	Excellent Student Cadre.	2016-2017
•	Keynote Speaker of Undergraduate Meeting for Learning Experience Exchange.	2017
•	Speaker as Freshman Representative in Opening Ceremony for freshmen.	2016

### **GRANT SUPPORT**

NSF REU - Big Data Analytics: Exploring the Darkweb.

St. Louis, MO, 2019

Jiangsu Provincial Government Scholarship Program of Overseas Studies for

Undergraduates.

St. Louis, MO, 2019

Nanjing, Jiangsu, China

## **PUBLICAITONS**

Dan Zhang, Qi Zhang, **Jiaming Qiu**, Peng Bai, Kang Liang, Xianghu Li, 2018. Intensification of hydrological drought due to human activity in the middle reaches of the Yangtze River, China. *Science of the Total Environment*, (637–638), 1432–1442.

## **ACTIVITES**

Math Modeling.	2017
Chorus Contest.	2016
Blood Donation.	2016
Drama Performing.	2016
University's badminton Club.	2016
Volunteer for World Meteorological Day.	2015
Youth Olympic volunteer.	2014
Volunteer for Gulou District Library of Nanjing, China.	2014
School's Astronomy Club.	2013