

# Ryan Zomorodi

Research Analyst · Data Scientist

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## Education

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### Master of Science in Health Analytics

Chicago, IL

University of Illinois Chicago

Aug 2023 - Present

- GPA: 4.00

### Bachelor of Science in Biological Sciences

Chicago, IL

University of Illinois Chicago

Aug 2019 - May 2023

- Minors: Computer Science & Public Health
- Graduated with Highest Distinction
- Honors College
- GPA: 4.00

## Work Experience

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### Research Associate

Chicago, IL

Children's Environmental Health Initiative

Jun 2023 - Present

- Instructed state, tribal, and local public health professionals on the use of GIS to assess and address chronic health disparities.
- Performed geospatial analysis of hospital and physician accessibility utilizing two-step floating catchment area methods.
- Developed python Rate Stabilizing Tool to generate generating reliable, local-level age-standardized measures of chronic disease using the restricted CAR bayesian model.

### Pharmacy Technician

Arlington Heights, IL

Walgreens

Jul 2021 - Jun 2023

- Utilized electronic health records software to access patient medical records, input insurance, allergy, and health condition records, and resolve patient inquiries
- Resolved insurance inquiries and resubmitted claims in order to ensure patient prescription adherence
- Filled, mixed, and dispensed prescriptions for approval by pharmacists

### Sales Associate

Arlington Heights, IL

Marshalls

Jul 2017 - Jul 2019

- Demonstrated problem-solving and teamwork skills by resolving customer complaints and collaborating with other staff members
- Managed inventory, cash register and merchandising tasks according to company standards
- Provided excellent customer service, which resulted in the doubling company goals for donations and credit card registrations

## Skills

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### Technical Skills

C, D3, git, ggplot2, HTML, LaTeX, markdown, Plot.js, Python, R, SQL

### Software

ArcGIS Pro, Microsoft Office Products

## Service

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### Youth Mentor & Tutor

Genify (formerly: Miracle for Youth)

May 2020 - Mar 2022

### Little Village READS Tutor

Erie Neighborhood House

Jan 2020 - Nov 2020

### Peer & Near-Peer Tutor

UIC Honors College Tutoring Center

Jan 2020 - May 2020

### Student Volunteer

Northwest Community Hospital

Jul 2018 - May 2019

## Teaching Experience

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### Using GIS to Study Social Determinants of Health with R

Northern Arizona University Center for Health Equity Research

[Resource Link](#)

Jun 06, 24 - Jun 07, 24

### State Health Departments Chronic Disease Surveillance

GIS Capacity Building Project

Mar 06, 24 - Jul 31, 24

### An Introduction to ArcGIS Online Mini-Course

GIS Capacity Building Project

Oct 17, 23 - Oct 24, 23

### Tribal Epidemiological Centers Chronic Disease Surveillance

GIS Capacity Building Project

Oct 10, 23 - Jan 31, 24

### A Gentle Introduction to GIS Mini-Course

GIS Capacity Building Project

Sep 19, 23 - Sep 26, 23

## Presentations

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### RNA-sequencing analysis of Macrophage Hyperactivation

UIC Undergraduate Research Forum

Apr 2023

### Empowering Community Members to Investigate and Address Chicago's Health Disparities

American Public Health Association

Nov 2022

### Developing Student Workshops to Increase Community Engagement in Addressing Chicago's Health Disparities

UIC School of Public Health Research and Scholarship Week Lightning Talks

Apr 2022

### Empowering Community Members to Investigate and Address Chicago's Health Disparities

UIC Minority Health Conference

[Recording Link](#)

Apr 2022

## Publications

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### Significance of IL-34 and SDC-1 in the pathogenesis of RA cells and preclinical models

Clinical Immunology

May 2023

• 10.1016/j.clim.2023.109635

### Inhibition of IRAK4 dysregulates SARS-CoV-2 spike protein-induced macrophage inflammatory and glycolytic reprogramming

- 10.1007/s00018-022-04329-8

### **Metabolic reprogramming of macrophages instigates CCL21-induced arthritis**

Immunology &amp; Cell Biology

Dec 2021

- 10.1111/imcb.12512

### **Metabolic regulation of RA macrophages is distinct from RA fibroblasts and blockade of glycolysis alleviates inflammatory phenotype in both cell types**

Cellular and Molecular Life Sciences

Oct 2021

- 10.1007/s00018021039785

### **Interleukin-34 Reprograms Glycolytic and Osteoclastic Rheumatoid Arthritis Macrophages via Syndecan 1 and Macrophage Colony-Stimulating Factor Receptor**

Arthritis &amp; Rheumatology

Sep 2021

- 10.1002/art.41792

### **Tofacitinib therapy intercepts macrophage metabolic reprogramming instigated by SARS-CoV-2 Spike protein**

European Journal of Immunology

Jun 2021

- 10.1002/eji.202049159

### **CCL25 and CCR9 is a unique pathway that potentiates pannus formation by remodeling RA macrophages into mature osteoclasts**

European Journal of Immunology

Jan 2021

- 10.1002/eji.202048681

### **IRAK4 inhibition: a promising strategy for treating RA joint inflammation and bone erosion**

Cellular &amp; Molecular Immunology

May 2020

- 10.1038/s41423-020-0433-8

### **Macrophages are the primary effector cells in IL-7-induced arthritis**

Cellular &amp; Molecular Immunology

Jun 2019

- 10.1038/s41423-019-0235-z

### **Impact of obesity on autoimmune arthritis and its cardiovascular complications**

Autoimmunity Reviews

Jun 2018

- 10.1016/j.autrev.2018.02.007

## **Honors**

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### **Highest Distinction**

UIC Department of Biological Sciences

2023

### **Pasteur Prize Nominee**

UIC Department of Biological Sciences

2023

### **Research Grant**

UIC Honors College

2022

### **Travel Grant**

UIC Honors College

2022

<b>Maurice Prize</b>	UIC Student Leadership and Civic Engagement	2022
<b>Undergraduate Most Outstanding Presentation</b>	UIC School of Public Health Research Week	2022
<b>Chancellor's Student Service Award</b>	UIC Student Leadership and Civic Engagement	2022
<b>President's Volunteer Service Award - Bronze</b>	UIC Student Leadership and Civic Engagement	2021
<b>1st place - Division 4</b>	Collegiate Chess League	2021
<b>Chancellor's Student Service Award</b>	UIC Student Leadership and Civic Engagement	2021
<b>Research Grant</b>	UIC Honors College	2020

## Professional Membership

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<b>American Public Health Association</b>	Jan 2022 - Present
<b>Harvard Innovation Lab</b>	Sep 2022 - Aug 2024
<b>Clinton Global Initiative University Fellowship</b>	Mar 2023 - Nov 2023
<b>American Society for Biochemistry and Molecular Biology</b>	Oct 2020 - Dec 2022

## Leadership

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<b>Secretary</b>	UIC Society of Future Physicians	2021 - 2023
<b>President</b>	Chess Club at UIC	2021 - 2023
<b>Secretary</b>	UIC American Society for Biochemistry and Molecular Biology	2021 - 2022
<b>Media chairman</b>	Spreading Healthcare Awareness through Reciprocal Education (SHARE)	2020 - 2022
<b>Student leader</b>	UIC Student Leadership and Civic Engagement	2019 - 2022
<b>Chapter representative</b>	UIC American Society for Biochemistry and Molecular Biology	2020 - 2021
<b>Vice-president</b>	Chess Club at UIC	2020 - 2021