

# CEDRIC VICERA

November 2021

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## EDUCATION

University of Pennsylvania Expected 2023

Master of Computer and Information Technology

University of Arizona 2020

B. A. in Philosophy (with Honors)

Thesis: *The Scope of Mechanistic Explanation* (Advisor: Richard Healey)

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## RESEARCH EXPERIENCE

Computational Social Science Lab 2021 –

PI: Duncan Watts

Task implementation for high-throughput experiments on group dynamics

St. Jude Children's Research Hospital · Department of Biostatistics Summer 2021

PI: Li Tang

Gut microbiome analysis of ALL patients for obesity status using mixed-effects modeling

Computational Medicine and Informatics Collaboratory 2018 – 2020

PI: Vignesh Subbian

Cohort discovery via tele-ICU systems to develop personas for critically ill mechanical ventilation patients

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## PUBLICATIONS

Analysis of Acute Respiratory Failure Patient Noninvasive Ventilation Therapy 2020

Patrick Essay, **Cedric Vicera**, Jarrod Mosier, Vignesh Subbian

*American Thoracic Society International Conference*

Persona Identification in Tele-ICU Data of Mechanically Ventilated Patients 2019

*UROC Abstract Review*

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## PRESENTATIONS

The Effect of the Gut Microbiome on Obesity in Survivors of Childhood Cancer

POE Lunch & Learn Series · St. Jude Children's Research Hospital

July 2021

Persona Identification in Tele-ICU Data of Mechanically Ventilated Patients  
UROC Research Conference (Poster) · University of Arizona August 2019

Phenotyping of Mechanically Ventilated Patients in the ICU  
UROC Summer Colloquium · University of Arizona August 2019

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## TEACHING

University of Pennsylvania · Teaching Assistant

Introduction to Software Development (Brandon Krakowsky)	Fall 2021
Introduction to Software Development (Brandon Krakowsky)	Spring 2021

University of Arizona · Head Section Leader

Computational Thinking and Doing (Dylan Murphy)	Fall 2019
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University of Arizona · Section Leader

Dealing with Data (Rich Thompson)	Spring 2020
Computational Thinking and Doing (Rich Thompson)	Spring 2019
Computational Thinking and Doing (Dylan Murphy)	Fall 2018

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## HONORS & AWARDS

Research Fellowships

UROC Summer Research Institute	Summer 2019
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Scholarships

Magellan Circle Scholarship	2019
H.J. & Signe Bonnevie Scholarship (2x)	2018, 2019
Laura and Arch Brown Scholarship	2018

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## GRADUATE COURSEWORK

Statistics and Machine Learning

University of Pennsylvania	
Fundamentals of Linear Algebra and Optimization	2022
Artificial Intelligence	2021
Statistics for Data Science	
University of Arizona	
Artificial Intelligence for Health and Medicine	2020
Neural Networks	2019

Computer Science

University of Pennsylvania	
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Blockchains and Cryptography	2021
Data Structures and Software Design	
Introduction to Computer Systems	
Mathematical Foundations of Computer Science	
Introduction to Software Development	2020
Philosophy	
University of Arizona	
Healthcare Ethics	2020
Symbolic Logic	2019

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## REFERENCES

Li Tang	Vignesh Subbian
Associate Member	Assistant Professor
St. Jude Children's Research Hospital	University of Arizona
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Brandon Krakowsky	Richard Thompson
Lecturer	Senior Lecturer
University of Pennsylvania	University of Arizona
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