

# 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  
(High-Throughput Experiments on Group Dynamics)

St. Jude Children's Research Hospital · Department of Biostatistics Summer 2021  
PI: Li Tang  
(programming in R; research on gut microbiome analysis of ALL patients for obesity status using mixed-effects modeling)

Computational Medicine and Informatics Collaboratory 2018 – 2020  
PI: Vignesh Subbian  
(programming in Python, R; research on 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
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
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	

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
li.tang@stjude.org	vsubbian@arizona.edu
Brandon Krakowsky	Richard Thompson
Lecturer	Senior Lecturer
University of Pennsylvania	University of Arizona
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