Catalina Vajiac

Saint Mary's College · 2018
University of Notre Dame · 2019
51686 Terri Brooke Dr. Granger, IN, 46530

(574) 309-0472 | cvajiac01@saintmarys.edu | www3.nd.edu/~cvajiac | catvajiac | catvajiac

Education: 4-1 Dual Degree

University of Notre Dame _Notre Dame, IN_
B.S. in Computer Science _Aug. 2015 - May. 2019_
GPA: 3.89/4.0

Saint Mary's College _Notre Dame, IN_
B.S. in Computing and Applied Mathematics _Aug. 2014 - May. 2018_
GPA: 3.90/4.0

Work Experience

Growing Graphs with Synchronous Hyperedge Replacement Graph Grammars _Notre Dame, IN_
Research Assistant   tweninger/PSHRG _January 2018 - Present_
- Parsed temporal graph data to find grammar for graph's growth
- Ongoing, results pending

Exploration of Numerical Precision in Deep Neural Networks _UCLA, California_
Research in Industrial Projects for Students Participant   jihangjie/AMD-RIPS2017 _June 2017 - August 2017_
- Studied resiliency of neural networks when exposed to lower numerical precision
- Analyzed effects of mixed and arbitrary precision
- Conducted through Instutute of Pure and Applied Mathematics, sponsored by AMD

Computer-Assisted Image Analysis for Paper Analytical Devices (PADs) _Saint Mary's College_
Research Assistant _May 2016 - December 2016_
- Created image analysis software to detect semi-quantitative colorimetric chemical tests
- Won Outstanding Poster Award at the 2017 Joint Math Meetings

Projects

KittyKatBot	simple Python IRC chatbot	kittykatbot
HoC Blog	blog for History of Computing class	hoc_blog
Neural Networks	senior comprehensive project	senior_comp
GoT Web?	GoT webservice that offers character/book information	got_webservice
Dotfiles	configuration files for i3wm, polybar, vim, tmux, bash, and other useful scripts	dotfiles
Spidey	simple forking webserver in C	private project

Honors and Awards

Jan. 2017	**Meritorious Winner**, Mathematical Contest in Modeling	_COMAP_
Jan. 2017	**Outstanding Poster Award**, MAA Undergraduate Poster Session	_Joint Math Meetings_
	Dean's List, All Semesters	_Saint Mary's College_

Clubs

President	Math && Computer Science Club, Saint Mary's College
Web Administrator	Society of Women Engineers, Saint Mary's College
Treasurer	Pi Mu Epsilon: Indiana Epsilon Chapter, Saint Mary's College
Member	Linux User's Group, University of Notre Dame

Skills

Proficient	Python, C, C++, Bash, LaTeX
Basic Knowledge	HTML/CSS, Javascript, Ruby

Coursework

Linear Algebra	Fall 2013
Calculus III	Fall 2014
Computer Programming (Python)	Fall 2014
Foundations of Higher Mathematics	Spring 2015
Intro to Differential Equations	Spring 2015
Electronic Communications	Spring 2015
Database Systems	Fall 2015
Numerical Analysis	Spring 2016
Probability	Spring 2016
Statistics	Fall 2016
Fundamentals of Computing	Fall 2016
Logic Design	Spring 2017
Data Structures	Spring 2017
Systems Programming	Spring 2017
Discrete Mathematics	Spring 2017
Simulation: Theory and Application	Fall 2017
Computer Architecture	Fall 2017
Programming Paradigms	Fall 2017
Programming Challenges	Fall 2017
Theory of Computing	Spring 2018
Operating Systems Principles	Spring 2018
A History of Computing	Spring 2018