JUSTIN PAYAN

Technical Skills

Computer Science

-Skilled in natural language processing, machine learning, and data analysis
-Proficient in Java and MATLAB; intermediate Prolog, R, C++, SQL; basic Python, C, Lua
-Experience publishing and presenting research, reading advanced research papers
-Basic experience with Unix, GitHub, pair programming, UML

Mathematics

-Multivariable calculus, linear and abstract algebra, analysis, discrete math, symbolic logic, graph theory

Education

University of Georgia Honors Program – Athens, GA (Expected Graduation May 2017) **August 2013-present**

A.B. Cognitive Science
B.S. Mathematics
M.S. Artificial Intelligence (UGA Honors Dual Degree Program)

3.95/4.0 GPA and 3.97/4.0 major GPA
Foundation Fellow Scholarship-Full attendance cost, travel-study/research funding
National Merit Scholarship, Zell Miller Scholarship, Presidential Scholar, Dean's List

Study Abroad at the University of Edinburgh – Edinburgh, UK **September 2016-December 2016**

-Studying machine learning, number theory, network theory, differential equations

Foundation Fellows Spring Travel-Study **March 2014-March 2016**

-Studied culture in Havana, Cuba and Buddhist monasticism in South Korea

UGA at Oxford Maymester – Oxford, England **May 2014**

-Studied dystopian literature with Dr. David Bradshaw of Oxford's Worcester College

Relevant Experience

HPE Vertica – Cambridge, MA **May 2016-July 2016**

-Improved runtime and accuracy of in-database clustering algorithm
-Prototyped distributed reservoir sampling algorithm
-Aided development of internal memory management API

Directed Research in Natural Language Processing – Athens, GA **August 2015-present**

-Implementing novel keyword extraction algorithm with neural networks and PageRank
-Presented poster at UGA's CURO Symposium in April 2016
-Building deep neural network relation classification system

Robert Bosch Centre for Cyber Physical Systems, IISc – Bangalore, India **June 2015-present**

-Developing SVM, ANN, and random forest tool for locating water distribution network leaks
-Predicting pressure in water distribution networks using artificial neural networks
-Published paper in ISLT 2016

Seminar on Topological Data Analysis – Athens, GA **January 2015–May 2015**

-Analyzed fingerprints using topological data analysis (TDA) package in R
-Introduced novel ANN-TDA hybrid algorithm for fingerprint classification
-Publishing paper (in progress) with classmates and Dr. Noah Giansiracusa

Cortical Architecture Imaging and Discovery Laboratory – Athens, GA **August 2014–May 2015**

-Synthesized recent research on interactions between neural oscillations
-Explored applications of information theory and time series analysis to EEG data

Other Interests

UGArden – Athens, GA **August 2014–present**

-Organize club outreach to UGA and the Athens community

Morton Theater – Athens, GA **January 2013–present**

-Design and execute contracted lighting designs on ETC Element console

Languages

Chinese - Intermediate oral and written
Spanish - Intermediate oral and written

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