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WORK EXPERIENCE

Teaching Assistant for Computer Science Department: (August 2017 – May 2018)

- Tutored students with different classes in the computer science curriculum at the University of Arizona and doctored final exams and took part in the grading process.

Teaching Assistant for Computer Science Department: (August 2014 – May 2017)

- Tutored students with classes in the Computer Science department at Berea College: Software Design and Implementation, Data Structures, Introduction to Game Design, Computational Complexity, Computational Intelligence, Embedded Systems, and Design and Analysis of Algorithms
- Developed class material for courses such as Computational Complexity

Undergraduate Research in Chemistry: (May 2016 – July 2016)

- Analyzed glyphosate degradation timeframe in soils of Berea College's forest
- Gained experience in data collection with an LC/MS instrument
- Presented work to URCPP group at Berea College, Berea Undergraduate Research Symposium (BURS) in poster session, and the Kentucky Academy of Science (KAS)

Undergraduate Research in Computer Science: (May 2015 – July 2015)

- Researched Artificial Neural Networks and their possible applications for motion control
- Developed an affordable traffic counting system using computer vision library OpenCV (background subtraction, running average, blob detection) on a resource-constrained device
- Presented work to URCPP group (July 2015) at Berea College, and BURS in poster session

OTHER WORK EXPERIENCE

- Photographer for Center for International Education at Berea College during welcoming week for new international students (August 2014, August 2015)
- Photographer for Exposaludable Event, Santa Cruz, Bolivia (April 2012, April 2013)

ACADEMIC BACKGROUND

Berea College: (August 2013 – May 2017)

- Undergraduate Bachelor of Arts in Computer Science with Computational Mathematics Concentration
- Undergraduate Bachelor of Arts in Chemistry with General concentration (August 2013 – May 2017)
- Overall GPA: 3.611 | Computer Science GPA: 3.786 | Chemistry GPA: 3.185

- Relevant Coursework: Computational Complexity, Programming Languages, Computer Organization, Numerical Analysis, Linear Algebra, Calculus I-III, Data Structures, Bioinformatics, Electronics

Centro Boliviano Americano (CBA); Santa Cruz, Bolivia: (April 2009 – June 2012)

- Obtained certification of advanced English competence awarded by the Ministry of Education in Bolivia after completing the three-year English program
- Awarded recognition for best academic track among my graduating class (English institution)

VOLUNTEERING ACTIVITIES

- Participated in building walls for a house with Habitat for Humanity program in Berea (November 2013)
- Helped with logistics at Exposaludable event (April 2012, April 2013)
- Taught English at my neighborhood's school during break season. (June 2011, June 2012)

SKILLS

- Computer languages: Python, C, C++, Racket (Lisp), Matlab
- OpenCV, Numpy, TensorFlow, Sphinx, API.AI, Alexa skills, Pytorch, LaTeX, data analysis
- Linux, Raspberry Pi, Arduino
- Languages: Spanish, English

AWARDS

- Won second place at Gatton FinTech Challenge for presenting a business model idea for "HelloBanking" project (April 19th, 2017)
- Won first place in CatHacks III hackathon with a project called "HelloBanking" that uses natural language processing and Amazon's Alexa to manage bank accounts using voice commands (April 15th-16th, 2017)
- Won first place in DerbyHacks II hackathon with a project called "SnapCal" that uses Tensorflow for image classification to detect items in food. Also won in two additional categories: best presentation (Showman award) and best use of domain space (February 24th-26th, 2017)
- 4-year full tuition scholarship at Berea College (August 2013 – May 2017)
- Member of the Epsilon Pi Tau honor society (2016)
- 3-year full tuition scholarship (Abraham Lincoln) for English classes at English institution (CBA) in Santa Cruz, Bolivia (April 2009 – June 2012)
- Awarded the OpportunityFunds scholarship to help pay for applications and exams (TOELF) to pursue higher education

INTERESTS

- Artificial intelligence, computer vision, human-computer interaction, natural language processing, robotics, embedded systems, cognitive science, computer architecture
- Finance and economics (especially related to fin-tech developments)

- Stock market trading and investing as well as real estate investing
- Entrepreneurship and business creation and management
- Languages (formal and natural)
- Photography, 3D modeling and animation

PAST PROJECTS

- NetBuilder: a python package hosted on PYPI servers. It provides a neural network class to create fully connected neural networks with few lines of code and can be easily trained with included backpropagation routines.
- HelloBanking: Allows one to manage a bank account using voice commands and Amazon's Alexa Skills. The project started as a way to help visually impaired people be able to access their banking information more easily.
- SnapCal: Uses tensorflow framework to analyze an image from the user's phone camera and detect different food items in it. The program then uses those labels to look up caloric information and report a total caloric count to the user through an app.
- Traffic Counter: A system designed with the original Raspberry Pi in mind. It takes video feed from a camera and uses background subtraction to detect moving vehicles on the road. The program counts the number of cars that transit that part of the road. One motivation for this project was to provide a non-disruptive and affordable way to gather traffic data.