Justin Paul Skycak

Experience

Current – Jan 2016
Data Scientist Intern @ Aunalytics (Tech Startup)

Current – Mar 2013
Learning Center Instructor @ Mathnasium of Granger (Tutoring Franchise)
Taught maths to students of all grades and occasionally ran the center.

Aug 2015 – May 2015
Summer Research Intern @ New Mexico Consortium (Engineering Lab in Los Alamos, NM)
› Attempted to generate neural firing rate oscillations using the brain-inspired PetaVision deep learning library
› Successfully implemented spiking neurons but unable to demonstrate spike-rate oscillations
› Notre Dame Summer Research Grant: apx $3,000

July 2013 – May 2013
Summer Research Intern @ QuarkNet (Particle Detection Lab at University of Notre Dame)
› Tested and analyzed efficacy of light generation/transmission materials
› Results sent to decision-makers of material upgrades in the CMS particle detector at CERN.
› Presented project at regional (NIRSEF) and state (HSEF) science fairs
› IAS Junior Research grant: $300
›Project name: "Optimizing Scintillation and Light Transmission for Use in a High-Energy Particle Detector"

May 2013 – Sept 2012
Volunteer Researcher @ Levine Lab (Particle Detection Lab at Indiana University South Bend)
› Designed and created a material to improve acoustic sensors in the COUPP dark matter detector
› Presented project at regional (NIRSEF), state (HSEF, INJSHS, IAS Talent Search), and international (ISEF) science fairs
› IAS Junior Research Grant: apx $50
› Project name: "Making a Matching Layer for Acoustic Sensors in a COUPP Dark Matter Detector"

2013 – 2011
Camp Counselor @ Children's Dispensary (Special-needs Nonprofit in South Bend, IN)
›Taught, supervised, and assisted special-needs children.
›Created promotional media CDs.

Education

Current | B.S. in Honors Mathematics @ University of Notre Dame
Aug 2014 |
› Took applied maths grad-level courses as a sophomore
› Glynn Honors Scholar
› Presented comp neuro project "Network Motif-Inspired Evolution of Hodgkin-Huxley Neuronal Networks with Spike-Timing Dependent Plasticity" at ND COS-JAM 2015
› Published maths project "Numerical Investigation of the 3n+1 Problem and its Continuous Extension" in Scientia, ND's journal of undergrad research, & served 2 yrs as maths section editor

May 2014 | Valedictorian @ Marian High School (Mishawaka, IN)
Aug 2010 |
› Eli Lilly Scholarship (4 yrs. full tuition at any Indiana college)
› National Merit Finalist
› National AP Scholar
› 2x regional Chem Olympiad regional finalist