Ryan Beauchemin

Contact

Current Address:	135 Jocelyn Lane #306, Mooresville, NC
Phone Number:	+1 (919) 628 6854
Primary Email:	ryan.w.beauchemin@gmail.com
Secondary Email:	vc.Ryan.Beauchemin@lowes.com

Experience

Aug 2015 - Current — Behavioral Algorithm Developer / Data Analyst, lowes.com, *Mooresville*

On the Personalization and Optimization team at Lowe's Home Improvement's dot com division, I create algorithms utilizing merchant and user data to provide visitors with intelligent and personalized recommendations. I also analyze clickstream, orders, cart additions, and revenue to optimize the experience.

Jun 2014 - Aug 2015 — Research Assistant at the Department of Physics and Astronomy, *UNC*

As a part of the **RESOLVE** team under Dr. Sheila Kannappan, I have been trained in dynamic observation, reduction of data, and instrumentation for the 4.1-meter Chilean SOAR telescope, and my research involved determination of three dimensional information from two dimensional projections.

Jan 2014 - Aug 2014 — Research Assistant at the Department of Physics and Astronomy, *UNC*

In Dr. Dan Reichart's group, I helped in the creation of the largest database for Gamma Ray Burst afterglows, working heavily with spreadsheets and data manipulation in a massive SQL database.

Oct 2013 - May 2015 — Teaching Assistant at the Department of Physics and Astronomy, *UNC*

I was an assistant for two years in the lab component of the University of North Carolina's Introductory Astronomy course. Teaching people about subjects that I deeply understand is incredibly rewarding.

Jun 2013 - Oct 2013 — Summer Intern at the Astronomy Research Center, *Raleigh*

Working with Dr. Rachel Smith and Dr. Patrick Treuthardt, I designed informative videos using iMovie and Keynote, gave presentations on solar phenomena with an Hα filtered solar telescope, and used IRAF to determine intrinsic properties of spiral galaxies.

Jan 2013 - Jun 2013 — STEM Lab Assistant at Wake Technical Community College, *Raleigh*

The STEM lab was created by the Math club and was a great introduction into teaching. I mostly worked with students who needed help with coding, physics, math, and astronomy.

Education

July 2015 — Bachelor of Science Degree in Physics, **University of North Carolina**, Chapel Hill
Major: Astrophysics | *Emphasis on Galaxy Evolution and Dynamics*
GPA: 3.0/4.0

July 2012 — Associate Degree in Science, **Wake Technical Community College**, Raleigh
Graduated with the highest honors | *Emphasis on Physics and Astronomy*
GPA: 4.0/4.0

Skills

Programming / Analysis:	Alteryx, Aqua Data Studio, emacs, Hadoop, IDL, JavaScript, Mathematica, MATLAB, **Python**, R, SQL, Teradata, XML in Linux, Mac OSX, and Windows environments
Presenting and Design:	Adobe Photoshop, GIMP, Keynote, LaTeX, Libre/MS Office
Specialized Astronomy:	DS9, GAIA, IRAF, RESOLVE Pipeline

Groups and Organizations

2014-2015	Member of Dr. Kannappan's RESOLVE team at UNC
2014-2015	Resource Manager of UNC's Society of Physics Students
2014-2015	Member of Accessibility Resources team at UNC
2013-2015	Member of Dr. Dan Reichart's GRB team at UNC
2013-2015	Member of UNC's Society of Physics Students
2012-2013	National Community College Aerospace Scholar at NASA MSFC
2012-2015	Member of the Mu Alpha Theta Math Honor Society
2011-2012	Senator of the Student Government at Wake Technical CC
2011-2015	Member of the Phi Theta Kappa Honor Society
2010-2013	Officer of Wake Technical CC's Math Club

Awards and Certificates

2015	Certificate of completion of Penn State Astrostatistics course
2015	Recipient of SKYNET Undergraduate Research Scholarship
2014	UNC OUR Travel Grant for American Astronomical Society 225th Meeting
2014	Beneficiary of NSF CAREER Award Supplement
2013	Recipient of North Carolina Space Grant for Undergraduates
2013	Accepted as student astronomer at NRAO WV for ERIRA-UNC
2013	Second place at the southeast regional calculus competition in GA
2012	First place at the North Carolina Calculus competition in Gastonia
2012	Second place at NASA MSFC NCAS rover competition
2012	Third place school-wide SML competition through AMATYC

Languages

English:	Native
French:	Conversational

Research Interests

Galaxy Evolution and Morphology, Dark Matter, Data Science, Gamma Ray Bursts, Kinematics leading to Star Formation, Instrumentation, Radio Astronomy, Statistics, and Simulation.