

Veronica Hanus

vzh@mit.edu <https://github.com/vzhz> 402.319.4517

Education

Colgate University, Hamilton, NY

Bachelor of Arts, Geology, May 2010

Alumni Memorial Scholar Fellowship Awardee

- \$5,000 award for the top 2% of each class year to fund research

Programming

Recuser, **Recurse Center**, New York City, NY, Sept. 2015 - Dec. 2015

- Three-month educational retreat for smart builders dedicated to self-improvement
- Building a function generator that will ease cross-dataset comparisons of climate data that is currently being done by researchers using functions written by hand for each comparison
- Built a flashcard game that uses tests and classes and is modal and modular and lovely in every way. Also encourages the user at appropriate times and keeps track of scores and maybe someday will store the high scores and give you certain cards based on previous performance

Data Collection & Management

Research Engineer, **Schlumberger-Doll Research Center Petrolabs**, Cambridge, MA, Mar. 2014 - Dec. 2014

- Prepared samples, collected mineralogy data, and presented findings
- Projects included samples from the Vaca Muerta, Eagle Ford, Marcellus, Bakken & Qusaiba formations
- Rebuilt mineral standards library, increasing the number of standards from 34 to 75

Research Assistant, **MIT Paleomagnetism Laboratory**, Cambridge, MA, Jan. 2012 - Oct. 2013

- Performed conglomerate test and alternating field demagnetization on early-earth rocks
- Improved procedure for removing contaminants from sample disks, allowing more precise measurements to be taken
- Improved automated sample changer fittings and drill press cooling system, designed sample holder for rock saw
- Maintained lab by completing organizational tasks, including ordering supplies, introducing others to procedures, & trouble-shooting

Data Intern, **NASA Jet Propulsion Laboratory**, Pasadena, CA, Jan.– Aug. 2009

- Led student effort to determine rock distributions for possible landing sites for the Mars Curiosity rover and developed methods to incorporate these distributions into GIS datasets
- Maintained ArcGIS database and prepared existing data for landing site selection
- Mentored three students, teaching them pertinent geology concepts and helping them adjust to lab
- Collaborated with software lead to implement improvements, developed assessment criteria

Organization & Communication

Event Lead, **Graduate Women at MIT (GWAMIT) Fall Leadership Conference**, Cambridge, MA Fall 2012

- Facilitated a panel of women who have managed a transition between academia and industry

Event Lead, **MIT Student Information Processing Board Cluedumps Lecture Series**, Cambridge, MA Fall 2011

- Facilitated a fifteen week series of technical lectures on a variety of computing-related topics that reached 250+ people
- Maintained event wiki using database

Senior Advisor (2009-2010) & *Vice-President* (Fall 2008), **Colgate University Geological Society**, Hamilton, NY

- Coordinated quarterly presentations of Earth Science topics at local schools with typical participation of six geology

students and 60+ middle school students

- Directed student trips to locations of geologic interest
- Facilitated communication between faculty and students by publicizing class trips, speakers, and club events
- Coordinated weekly “bad geology” movie series and moderated accompanying discussions

Student Senator, Colgate University Student Government Association, Hamilton, NY, 2005-2007

- Served on Academic Affairs Board as one of two students elected to advocate for student needs
- Created system for inter-dorm used textbook sales using Microsoft Excel Macros
- Acclaimed for creative problem-solving and outstanding communication with constituents

Teaching & Advising

Science Instructor, Guided Discoveries Astrocamp, Idyllwild, CA, Spring 2015

- Developed curriculum and introduced 3rd-11th graders to planetary science and geology in an experimental teaching environment

Writing Instructor, MIT Academic Teaching Initiative SAT Prep, Cambridge, MA, 2011-2012

- Developed and taught 12-week course for 110 students, a low-cost alternative to commercial SAT preparation
- Developed online system for student homework submission and grading using a combination using Google Tools (Drive, Forms, and Sheets (Apps Script custom functions))

Instructor, Bootstrap Afterschool Program, Cambridge, MA, 2011

- Used functional programming (Scheme) to teach 14 middle-school students to create video games and strengthen math skills

Grant Writer, ARRL Education and Technology Program Grant for School Radio Equipment, Dec. 2010

- Wrote successful \$3,000 grant to purchase robotics for after-school programs in a disadvantaged community

GIS Instructor and Coach, Academy Robot Club, Elkhorn, NE, Fall 2010

- Integrated GIS and robotics to make them accessible to 10 middle-school and junior high students

Skills*

Tool	Novice	Functional	Competent	Proficient	Expert
Python	★	★	★		
LaTeX	★	★	★	★	
ArcGIS Python modules	★	★	★	★	
HTML/CSS	★	★			
Javascript	★				
MongoDB	★				
Django	★				

Operating System	Novice	Functional	Competent	Proficient	Expert
Macintosh	★	★	★		
Linux (Ubuntu)	★	★	★		
Microsoft	★	★			

Certifications

Licensed Private Pilot (PVT), National Registry Certified Emergency Medical Technician (EMT-B), Wilderness First Aid Certified (WFA), CPR/AED for Professional Rescuers, Red Cross First Aid/AED/CPR Instructor

Publications and references available upon request.

*Table uses Dreyfus model of skill acquisition