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 Fellow, awarded to top 2% of each class year to fund research

Software Enginnering

Recuser, **Recurse Center**, New York City, NY, Sept. 2015 - Dec. 2015
· Full-time, three-month educational retreat for software developers dedicated to self-improvement
· Building a function generator to facilitate cross-dataset comparisons of climate data, providing ¡Quantitative measure of something you improved, how many people are using it or something. important part for now: currently being done by researchers using functions written by hand for each comparision, and that is bolony¿
· NOTE: add tools used, number of people expected to use it, time saved
· Developed a flashcard game using modular, object oriented programming, and effective testing. Encourages the user based on performance and tracks scores.
· NOTE: how to show in the pdf that there are links there, what am I actively learning, also Austin W says talk about low-level stuff since I'm a programmer not a gamer and Cbreezy says talk about what the game does and safe the low-level walkthough for an interview. what do?

Data Collection & Management

Research Engineer, **Schlumberger-Doll Research Center Petrolabs**, Cambridge, MA, Mar. 2014 - Dec. 2014
· Prepared samples, collected mineralogy data, and presented findings for 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 in order to identify the oldest known terrestial magnetization and determine when the field originated
· Improved procedure for removing contaminants from sample disks by adjusting the time and sonicating the disks during acid wash, allowing more precise measurements to be taken
· Introduced silicone fittings to allow disk-mounted samples to be measured using the automated sample changer, allowing up to 200 samples to be run in sequence and saving over 30 hours per run
· Designed drill press cooling system for extracting rock cores and sample holder to cut cores on a saw designed for rock hand samples
· Maintained lab by completing organizational tasks, including ordering supplies, introducing others to procedures, & trouble-shooting NOTE: should I remove this bullet because no one cares about my organizational skills?

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
· NOTE: feeback says I should say how I did this, but I'm not sure how to describe. I introduced students to software, acted as their tech support, reported to boss-man, organized their/our results so it could be reported and turned into mapping layer later, and gave students advice before their 1-on-1's
· 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 by providing user UX/UI feedback and noting bugs identified during use
· Developed assessment criteria for the hazards identified by software

· NOTE: does the causality arrow on that matter? it's not the like the sofware handed back hazards and I said oh that's what that is

Organization & Communication

Event Lead, **MIT Student Information Processing Board Cluedumps Lecture Series**, Cambridge, MA Fall 2011
· Facilitated a 15-week series of technical lectures on a variety of computing-related topics that reached 250+ people

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))

Programming Coach, **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 NOTE: Should I chop this since my communication skills are demonstrated in other areas?

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 NOTE: Is the GIS important somehow or should I chop this?

Skills

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

Tool	Novice	Functional	Competent	Proficient	Expert
Python	★	★	★		
LaTeX	★	★	★	★	
ArcGIS Python modules	★	★	★	★	
TML/CSS	★	★			
Javascript	★				
MongoDB	★				
Django	★				
Git	★	★			
Operating System					
Macintosh	★	★	★		
Linux (Ubuntu)	★	★	★		
Microsoft	★	★			

(Table uses Dreyfus model of skill acquisition)