

RACHEL LANDERS

San Antonio, TX · rachel.landerson12@gmail.com · 2145326114

EXPERIENCE

USAA

Software Developer & Integrator I

San Antonio, TX

July 2017 - Present

- Design, implement, & maintain visualizations of system/application health data for business and IT audiences using Tableau
- Manually validate data moved from source to long-term storage layer of monitoring platform is accurate and formatted consistently
- Co-wrote Python program with team to confirm persisted data is consistent with source data
- Continuously learn, execute, and promote visualization best practices
- Lead effort to engineer Nifi data pipeline moving data from source and persisting in HDFS and Hive
- Co-wrote Python Zalenium framework with team to gather and persist Tableau workbook performance data
- Enforce and follow data development lifecycle compliance standards

Southwest Research Institute

Research Analyst

San Antonio, TX

May 2015 - July 2017

- Built data processing pipelines and web applications for science operations and science data analysis for NASA missions including: Juno, Cassini
- Designed, implemented, maintained, & analyzed Juno spacecraft downlink data volume algorithm model spreadsheets; verified spreadsheet-calculated data against data generated by the web application
- Created data visualizations in JFreeChart and Microsoft Excel for science data analysis and science operation planning
- Collaborated with scientists & team members on web application requirements and design
- Wrote and updated software documentation
- Demonstrated beneficial coding practices, programming in Java 8, and new technologies at monthly training meetings
- Enhanced user experience with modern user interface libraries
- Interpreted science data to design relational databases
- Wrote unit tests using JUnit
- Coordinated with team members on shared assignments
- Updated section management Excel spreadsheets tracking server, staff planning, & staff skills statistics

Texas A&M University-Commerce

Graduate Teaching Assistant

Commerce, TX

August 2013 - May 2015

- Instructed calculus I labs & supplementally train students on programming in Wolfram Mathematica
- Constructed visual aids in Wolfram Mathematica to demonstrate calculus concepts
- Wrote calculus I/III solution keys & programming guides in Wolfram Mathematica
- Maintained records of 200+ students' grades, attendance, & behavior using Microsoft Excel
- Coordinated development of lesson plans & classroom management techniques with fellow instructors

Lowe's
Cash Office Clerk

Greenville, TX
March 2013 - March 2014

- Analyzed storewide electronic records to determine sources of financial overages/shortages
- Investigated possible fraudulent activity with the help of lead cashiers, management, & loss prevention

Robbins Engineering
Administrative Assistant

Robin's Engineering
May 2010 - August 2011

- Tracked & analyzed customers' water usage to determine origins of system malfunctions using Microsoft Excel
- Created visual charts conveying wastewater system data & water usage using Microsoft Excel
- Negotiated financial disputes between employer & customer
- Corresponded with county & state level health offices to ensure compliance with local health codes

SKILLS

Languages:	R, Python, MatLab, Wolfram Mathematica, IDL, Java, JavaScript, SQL, CSS, HTML, JSON, XML, LaTeX
Data Visualization Tools:	Tableau, Plot.ly, JFreeChart, Microsoft Excel, ggplot2
Data Storage Technologies:	Hive, HDFS, Oracle, MySQL
Software:	Nifi, Control-M, GitLab, Eclipse, Sublime

EDUCATION

University of Texas at San Antonio
Master of Science Data Analytics

San Antonio, TX
August 2019 - Present

Texas A&M University-Commerce
Master of Science Mathematics

Commerce, Texas
August 2013 - May 2015

Texas A&M University-Commerce
Bachelor of Arts Mathematics, Spanish

Commerce, TX
August 2008 - December 2012

RESEARCH

-
- *The SuperNovae Analysis APplication (SNAP): A new analysis tool for understanding the physics of supernovae.* Co-author, submitted, 2016
 - *A new combinatorial interpretation of multinomial coefficients.* Master's thesis, TAMU-Commerce, 2015
 - Texas A&M University Annual Pathways Student Research Symposium, TAMU-Kingsville, Kingsville, TX, Fall 2013, poster presentation. Title: "A new combinatorial interpretation of multinomial coefficients."
 - *Predictors of success in the admissions standards of Texas A&M University-Commerce Honors College.* Honors thesis, TAMU-Commerce, 2012