

Jenica Andersen

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EXPERIENCE

Metis Remote
Data Scientist Dec. 2021 to Aug. 2022

- Completed 7-month Data Science immersive program focused on Business Intelligence, Machine Learning, Predictive Modeling, Deep Learning, and Data Engineering
- Developed computational algorithms and used statistical methods to find patterns and relationships in large volumes of data using dominantly Python packages
- Portfolio contains 7 end-to-end, independent projects with Business application as focus. See *Projects* section for description of key projects

AIM GeoAnalytics Missoula, MT
Data Analyst, Senior Geologist Dec. 2013 to Dec. 2019

- Project manager, leading projects from inception to timely completion, engaging stakeholders, facilitating client workshops, conducting trainings with diverse groups, and soliciting reviews from clients
- Big Data project collaborated with engineering team to create novel, end-user controlled probability maps. My work lead to the creation of a subsidiary company.
- Collected and analyzed diverse data, digging deeper on parameters of interest, and building predictive models
- Crafted and maintained project schedules and best-practices instructions, participated in weekly meetings
- Presented at professional conferences and edited expert witness reports
- Trained on database design and management

Dartmouth College Hanover, NH
Adjunct Faculty Sept. 2011 to Aug. 2013

- Lectured weekly to students from diverse fields of study, graded reports, instructed laboratory sections, aided field trips and mentored students

Sunburst Consulting Billings, MT
Lead Geologic Consultant Aug. 2009 to Aug. 2011

- Successfully lead real-time drilling operations by prioritizing short-term and long-term tasks and using diplomatic approach to build trust and guide project members toward vested solutions, to ultimately get jobs done successfully
- Developed rapid analyses on multiple data types for immediate implementation
- Published detailed documentation reports with state governments and stakeholders across the enterprise
- Guided high-risk decisions and steer operations with a clean track record of target drilling
- Responded to inquiries and requirements, advised cross-discipline personnel and collaborated with clients

Statoil Hydro Stavanger, Norway
Exploration Geologist Intern June 2010 to Aug. 2010

- Explored and visualized diverse data using ArcGIS, modeling findings and discovering a lead on a new resource in the North Sea
- Presented results to audiences with a range of expertise and was offered funding to continue the research

PROJECTS

Deep Learning for Conservation: Classifying Drone Images from Protected Lands

- Classified 21,500 low-resolution drone images as containing columnar cacti or not--data came from effort to develop solutions to automate surveillance of protected areas
- Used python code to create custom Convolution Neural Networks (Tensorflow and Keras) unsupervised ML model
- Custom model contained rescaling, BatchNormalization, SeparableConv2D, MaxPooling2D, GlobalAveragePooling, and Dropout layers and achieved accuracy of 99.3, out performing MobileNet transfer learning model trained on the ImageNet database

Engineering a Data Pipeline for Topic Modeling the New York Times

- Created data-pipeline from inception to operation, pulling in New York Times archive, and modeling topics on streamlit app
- Deployed API get-request to obtain 747,000 articles, converted json to tabular data, stored in SQL database in AWS S3, processed in EC2
- Launched end-user controlled Streamlit App for topic modeling and WordCloud creation

Confident Short Term Real Estate Investing: Building Permit Trends that Investors Should Not Ignore

- Gathered publicly available, municipal data on building permits and real estate values over time
- Utilized Tableau and Google Sheets to join multiple datasets, and discovered construction and cost trends across neighborhoods
- Recommend investors seek homes with unfinished basements in areas with wide range of property values (and other recommendations)

The State of ESG: Using NLP to Illuminate Modern Corporate Sustainability Issues

- Conducted Unsupervised NLP on 1,000 shareholder resolutions from ceres.org, modeling the top semantically coherent topics using python code
- Preprocessed corpus with Regex and Porter stemmer, used CountVectorizer and NMF for modeling and clustering, modeled sentiment analysis
- Visualized results with Matplotlib and Wordcloud, and demonstrated specific application via custom Streamlit app

EDUCATION

Dartmouth College
Master's of Science, Earth Sciences

National Geothermal Academy
Certificate in geologic, engineering, and economic solutions to Geothermal Energy production, with top industry experts

University of Potsdam, Germany
Bachelor's of Science, Dual Degree--International FieldGeosciences

University of Montana, Missoula
Bachelor's of Science, Geosciences
Bachelor's of Arts, Creative Writing
Watkins Scholar--Interdisciplinary project work, Riverside Geology, a guide to the geology of the Clark Fork River

SUMMARY

Data Scientist with more than ten years of domestic and international experience as a Data Analyst and Physical Scientist. Bachelor's degree in writing and certified in public speaking. Proven track record of successful project management, with history of profitable stakeholder engagement, leading high-risk decisions on fast-paced and complex problems. Currently co-leading Marketing Committee for Seattle-based non-profit, and Vice President of leadership team at local eco-school. Meticulous budgeter. Quick learner. Question asker. Eager to help!

SKILLS

PROJECT MANAGEMENT

Agile Project Management
Asana
Database Management
Stakeholder Engagement

BUSINESS

Technical Writing
Detailed Documentation
Public Speaking
Microsoft Word and PowerPoint

VISUALIZATION

Adobe Illustrator/Photoshop
Tableau
PowerBI
Matplotlib
Seaborn

CLOUD COMPUTING

GitHub
AWS (S2 and EC3)
Trained in Hadoop

PROGRAMMING

Python
SQL
SciKit-Learn
Web Scraping
json
Streamlit
terminal commands
Familiar with R
Basic knowledge of HTML

MACHINE LEARNING

Natural Language Processing
Deep Learning
Sentiment Analysis
Linear Regression
TensorFlow/Keras
Image Classification
Logistic Regression

VOLUNTEERING

WiDS(Women in Data Science), Puget Sound · Current
Co-Lead Marketing Team
Responsible for WiDS Meet a Data Scientist Blog

Clark Fork School · 2018 to Current
Vice President of Board of Directors
Missoula, MT
Responsible for monitoring budgets, asking tough questions and voting on leadership decisions that often challenge the status quo with genuine passion for the community, its people and its purpose

Toastmaster's International · Club President 2017 to 2020
Missoula, MT
Certified Competent Communicator and Trained Leader

STEMulating Diversity and Inclusion · 2019
Co-founder of AAPG special interest group