

Gabrielle Smith

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SUMMARY OF QUALIFICATIONS

- Proficient with Python and R machine learning libraries (scikit-learn, TensorFlow, tidymodels)
- Educational expertise in linear models, sampling methods, multivariate analysis, and stochastic processes
- Knowledge of ML models (boosting, random forests, deep learning) with applications in Python and R
- Experiences with Google Cloud, Jupiter Notebooks, Git/GitHub for collaborative projects
- Experience processing remote sensing images for data analysis in various contexts
- Strong data communication, visualization, and presentation skills

EDUCATION

Master of Environmental Data Science, 4.0 GPA (June 2023)

Bren School of Environmental Science & Management – University of California, Santa Barbara (UCSB)

Highlighted Coursework: Machine Learning in Environmental Science, Modeling Environmental Systems, Geospatial Analysis & Remote Sensing, Databases & Data Management (SQL)

Employment: UCSB Undergraduate Teaching Assistant – Exploring Water Data (9/22–12/22), Critical Thinking and Evidence-Based Reasoning for the Environment (4/23–6/23)

Bachelor of Science in Statistics and Data Science, 3.77 GPA (March 2022)

University of California, Santa Barbara (UCSB)

Honors: Dean's Honors (6 quarters), College of Letters and Science Honors

Leadership/Involvement: Food Not Bombs Isla Vista (FNBIV), Community Affairs Board (CAB), Tutor

MASTER'S CAPSTONE PROJECT

Measuring Agricultural Adaptation to Climate Change in Zambia Using Satellite Imagery & Machine Learning

Role: Project Manager | Client: Tamma Carleton (9/22–6/23)

- Use MOSAIKS API and Microsoft Planetary Computer to featurize satellite images of Zambia using PyTorch and random convolutional features with extensive data manipulation in R and Python
- Train and test cross-validated ridge regression models to optimize predictive accuracy across agricultural variables (crop yield, crop loss mechanisms, etc.) to provide critical insights into food security
- Generalize MOSAIKS pipeline

PROFESSIONAL EXPERIENCE

Research Assistant – Koegel Autism Center, Santa Barbara, CA (9/18–9/22)

- Conducted thorough data collection and analysis from intake, progress, and check-out meetings to establish client goals, monitor progress and enhance curriculum development
- Implemented and developed strength-based, motivational interventions and supports for individuals and families affected by autism spectrum disorder
- Utilized evidence-based intervention models such as Social Tools, Rules for Teens and Pivotal Response treatment, originated at Koegel Autism Center, to teach social skills to toddlers with autism

SKILLS AND ADDITIONAL EXPERIENCE

Technical: R, Python, SQL, Google Earth Engine, Microsoft Planetary Computer

Lectures: "Introduction to R: Data Wrangling," April 27, 2023, University of California, Santa Barbara

Publications: (under review). Evaluation of a Brief Telehealth PRT Training Program for Parents of Autistic Children. *Journal of Early Intervention*.

Additional Experience: CCAMPIS Evaluation Coordinator – UCSB Early Childhood Care and Education Services, Santa Barbara, CA (10/20–9/21); Student Volunteer – GIVE Volunteers, Mueang Kong, Thailand (8/19)