Andrew Hayden Morris

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EDUCATION

PhD Biology, (2022) University of Oregon

MS Soil Science, (2017) The Pennsylvania State University

BS Plant Sciences, (2014) Cornell University

Eugene, OR, USA State College, PA, USA Ithaca, NY, USA

RELEVANT EXPERIENCE

Researcher in Big Data and Precision Medicine

Postdoctoral Scholar, Centre for Precision Psychiatry, University of Oslo

Mar 2024 - Present Oslo, Norway

- Built data pipelines for processing genetic and clinical data from Norwegian health registries across thousands of subjects for integration into precision medicine platforms
- Developed software package for individualized risk prediction to automate testing and validation workflows
- Led collaborative data infrastructure projects integrating multiple patient registries, managing data contracts and quality standards
- Organized the 2024 Oslo Bioinformatics Workshop Week, coordinated technical workflows for over 100 participants

Researcher in Animal Microbiomes and Aquaculture Systems

Postdoctoral scholar, Institute of Ecology and Evolution, University of Oregon

Visiting scholar, Department of Biotechnology and Food Science, NTNU

Mar 2022 - Dec 2023 Eugene, OR, USA Trondheim, Norway

- Built data pipelines to analyze the impact of environmental factors (antibiotic treatment, stocking density) on aquaculture facilities
- Conducted comparative analysis of recirculating aquaculture systems between Oregon and Norwegian facilities, established data collection protocols for water quality and fish health monitoring
- Managed and processed datasets from dozens of published reports on animal microbiomes, developed and conducted analyses, and presented findings in *Nature Microbiology*

PhD Research Fellow

Institute of Ecology and Evolution, University of Oregon

Aug 2017 - Mar 2022 Eugene, OR, USA

- Integrated datasets from dozens of sites across Brazil and Gabon on soil characteristics, biological data, and methane production with laboratory measurements for environmental monitoring
- Developed automated data processing workflows that transformed raw soil and gas measurements into actionable insights for climate research
- Created insights from data pipelines that contributed to securing \$3 million USD in funding from the U.S. National Science Foundation

MS Research Fellow

Aug 2015 - Jul 2017 State College, PA, USA

Department of Ecosystem Science and Management, Penn State University

- Collaborated with agricultural industry partners to design and implement data collection systems at research stations and commercial farms
- Built R-based analytics pipelines that processed farm data to optimize nutrient management strategies
- Delivered data-driven recommendations for farmers and agricultural stakeholders balancing profitability with environmental sustainability

LANGUAGES

English: Native speaker with excellent written and verbal communication

Norwegian: Completed formal A1 and A2 courses with structued textbook study through B1/B2. Daily practice in reading, writing, listening, and speaking.

TECHNICAL SKILLS

Data Engineering & Analytics

- R Expert in data processing, statistical modeling, plotting and package development
- Python Proficient in data processing, pipeline automation and package development
- Git/Github Experienced with version control and collaborative development

Infrastructure & Tools

- Cloud Computing Experienced with cloud platforms and distributed computing systems (Slurm, Tjenester for Sensitive Data)
- Workflow management Intermediate proficiency in GNU Make and automated pipeline orchestration
- Docker & Containerization Experience with containerized development environments
- Unix/Bash Proficient in command-line tools and shell scripting for automation

Leadership & Communication

- · Proven ability to translate complex technical concepts for both technical and non-technical stakeholders
- · Experience leading cross-functional project teams and managing international collaborations
- Skilled in workshop organization and technical presentation to diverse audiences
- Supervised multiple trainees and taught courses at university level