Daniel Sinderson

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EDUCATION

Bachelor of Sciences in Mathematics   Expected December 2024
Southern Oregon University, Ashland, OR

Associate of Applied Sciences in Electronics Engineering Technology   June 2016
Portland Community College, Portland, OR

Bachelor of Arts in Anthropology, Minor in Sociology   June 2012
Portland State University, Portland, OR

AWARDS AND HONORS

Mathematics Faculty / Eugene W. Bowman Award for Outstanding Senior in Mathematics	2024
STEMREx Summer Research Fellowship	2023
Mathematics Faculty / Eugene and Ida Bowman Mathematics Scholarship	2023-2024
SOU Hackathon 1st place	2023
Kay Snow Award for Poetry	2009

RESEARCH INTERESTS

Mathematical and Predictive Modeling	Theory of Social Institutions
Complex Systems	Public Interest Technology

WORK EXPERIENCE

Integration Engineer Intern   May 2023–July 2023
Shasta Networks, Ashland OR
- Create automation scripts for in-house auditing and data validation in Python
- Write database queries and regular expressions to retrieve and validate data
- Evaluate and triage support tickets in Jira to improve customer experience
- Troubleshoot and debug customer issues appearing in logs and communicate fixes to customers

Designer IV   January 2018–October 2019
KForce (contracted to HP), Corvallis, OR
- Collect experimental materials data and perform simple analyses in Excel: e.g. tensile strength
- Write VBA scripts and Excel formulas to automate data validation
- Maintain, troubleshoot, and repair mechatronic assemblies, communicating and recording actions taken in a computerized maintenance management system (CMMS)
- Create and update process documentation
- Train new technicians and provide guidance to less experienced coworkers in solving problems

Equipment Engineering Technician I   June 2016–October 2017
Microchip Inc., Gresham, OR
- Maintain and troubleshoot mechatronic assemblies, communicating and recording actions in CMMS
- Train in first aid, CPR, and hazardous waste response as part of the emergency response team
- Create and update process documentation

SKILLS

Data Analysis and Statistics	Linux (incl. terminal)	Complex Problem Solving
Data Visualization	Excel (incl. VBA scripting)	Debugging Software & Hardware
Advanced Mathematics	Office Suites (Microsoft, Google)	Interpersonal Communication
Programming (Python, C, SQL, R)	Technical Writing (incl. TeX)	Customer Service

PAPERS AND PRESENTATION

Sinderson, Daniel, "Modeling Open Systems with Category Theory." (June 2024)

Helman, William; **Sinderson, Daniel**, "Comparing Classical and Nonclassical Symmetries of Nonlinear Partial Differential Equations." (November 2023).
https://github.com/danielsinderson/Symmetry-Analysis-Summer-Research

Sinderson, Daniel, "Solitons and the Korteweg-De Vries Equation." (May 2023).

Sinderson, Daniel, "The Geometric Algebra of the Plane." (November 2022).

Collins, Sara, Dellabough-Gormley, Elona, **Sinderson, Daniel**, Wilson, Lindsay Gobel, "Assessing The Urban Farm Collective: A Socio-Ecological Perspective." (June 2012).

Sinderson, Daniel, "Detecting Anthropogenic Fire Regimes in the Pacific Northwest." (March 2012).

PROJECTS

Assistant App   October 2023
CLI scripts in Python
github.com/danielsinderson/assistant_app

Moon Base Books   March 2022–September 2023
Independent Publishing Company

Moon Base Books Website   July 2023–September 2023
Website built in Python with the Reflex Framework
moon-base-books.com
scripts at github.com/danielsinderson/moon_base_scripts

Daily Journal App   July 2023–August 2023
CLI script in Python
github.com/danielsinderson/dailyjournalapp

Alternate Lights   January 2022
Top-Down 2D Action Game

Phase Modulation Synthesizer   October 2021–November 2021
Embedded Project
hackster.io/scraptured/phasemod-drone-synth-w-arduino-nano-mozzi-7ab2ff

Tensegrity   March 2020–October 2021
Poetry Book

Corialis   June 2021–August 2021
Point-and-Click Puzzle Game with Caiden White and Morgan White

Space Kitty   January 2021

2D Platformer Game with Caiden White and Morgan White

Cheap DIY-Friendly Synthesizer Modules   February 2020–August 2020
Embedded Project
hackster.io/scraptured/lo-fi-arduino-nano-synth-modules-fb3a66

Vocoder   June 2014–May 2020
Poetry Chapbook

Outpost   November 2019
Procedurally-Generated Novel
github.com/danielsinderson/Outpost_NaNoGenMo2019

Reaching   November 2018
Procedurally-Generated Novel
github.com/danielsinderson/NaNoGenMo2018

Marked   March 2018–June 2018
Poetry Chapbook with Amanda Haswell

Meridian   June 2016–February 2017
Poetry Chapbook with Amanda Haswell

Arduino Loop and Effects Pedal   April 2016–May 2016
Embedded Project

Project Siddi   June 2013–August 2013
Archaeological Field School Studying Bronze Age Nuragic Culture

Geoarchaeology Field Work   April 2012–May 2012
Core Samples taken around the Pacific Northwest for Course Work

Field Work at the Cascade-Siskiyou National Monument, Box O Ranch   June 2011–August 2011
Volunteer Field Work done with the Bureau of Land Management