Daniel McNeela

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY

B.A. in Applied Mathematics
College of Letters and Sciences
Aug. 2012 - Dec. 2017 | Berkeley, CA

SAN DIEGUITO ACADEMY

High School
Aug. 2009 - Jun. 2012 | Encinitas, CA

LINKS

Github:// **mcneela**
LinkedIn:// **daniel-mcneela**

COURSEWORK

IN PROGRESS

Mathematical Logic
Numerical Analysis
Computational Linguistics

COMPLETED

Honors Multivariable Calculus
Honors LinearAlgebra and Differential Equations
Honors Abstract Algebra
Real Analysis
Advanced Linear Algebra
Structure and Interpretation of Computer Programs
The Brain, Mind, and Behavior
Organic Chemistry

ONLINE & SELF STUDY

Topology
Artificial Intelligence
Algorithms and Data Structures
Natural Language Processing
Machine Learning

TECHNICAL SKILLS

PROGRAMMING

Proficient
Python • Matlab • LaTeX
HTML • CSS • Jekyll
Familiar
C • Java • Git • NLTK

EXPERIENCE

ELITE EDUCATIONAL INSTITUTE | Mathematics Instructor

- SAT Preparation
- ACT Preparation
- ISEE Preparation
- AP Calculus tutoring

UC BERKELEY CS 61A | Undergraduate Tutor

- Led weekly supplemental course sections
- Assisted in the development of section teaching materials

PROJECTS

PERSONAL WEBSITE | HTML, CSS, Javascript, Jekyll, Ruby

Developed in 2016

- Implements a Jekyll backend
- Templating via Liquid
- Implemented a custom reading feed using a Ruby script to access the GoodReads API

CHIP-8 EMULATOR | Python 3, Tkinter

Developed in 2015

- Emulator of the Chip-8 virtual machine run on some of the very first personal computers such as the Cosmac VIP and Telmac 1800.
- Developed a GUI in Tkinter
- Implemented hardware instructions in Python code

MATERIX: MATRIX ALGEBRA SYSTEM | Python 3

Developed in 2014

- Command line and text-based tool for performing matrix algebra.
- Developed using an object-oriented paradigm
- Implements the Strassen Algorithm

SCHEME INTERPRETER | Python 3

Developed in 2013

- Interpreter for the functional language Scheme.
- Course project for CS61A at UC Berkeley.

TWITTER SENTIMENT ANALYZER | Python 3

Developed in 2013

- Analyzes and displays Tweet sentiment by geographic region.
- Course project for CS61A at UC Berkeley.

AWARDS

2012   National Merit Finalist
2012   National AP Scholar
2012   Rensselaer Medal