**LAUREN MIZNER**

EDUCATION

**HARVARD CS50**

**COMPUTER SCIENCE & PROGRAMMING BOOTCAMP**

Graduated March 2021 | Los Angeles, CA

**UNIVERSITY OF CALIFORNIA – LOS ANGELES**

**MASTER OF SCIENCE**

Graduated June 2019 | Los Angeles, CA

Major: Structural & Earthquake Engineering

**UNIVERSITY OF NEBRASKA – LINCOLN**

**BACHELOR OF SCIENCE**

Graduated May 2017 | Lincoln, NE

Major: Civil Engineering

Honors: Dean’s List 2016-2017 (Senior Year)

SKILLS

**TECHNICAL SKILLS**

C | Python | HTML | CSS | JavaScript | AWS | SQL Node.js | Express.js | Flask | Microsoft VBA | MATLAB

WORK EXPERIENCE

**WALTER P MOORE**

**GRADUATE ENGINEER – STRUCTURAL ENGINEERING**

July 2019 – November 2020 | Los Angeles, CA

* Utilized Excel and Microsoft VBA to develop a VBA spreadsheet for Fortune 500 company to automate structural analysis calculations for Fp and anchorage forces per ASCE Chapter 13 requirements to be utilized on structural engineering projects nationwide
* Acted as Learning Coordinator for the team, which consisted of communicating with vendors, scheduling seminars, recording attendance, and filing paperwork for continuing education credit
* Utilized SAP 2000 to perform gravity and lateral analysis of steel show piece and non-typical structures for amusement parks
* Designed shear and moment connections using a combination of RAM Connections and calculations developed in Excel
* Performed gravity analysis and vibration analysis in ETABS to efficiently size composite steel beams for a multi-story office building

**ALFRED BENESCH & COMPANY**

**DESIGNER 1 – TRAFFIC ENGINEERING**

May 2017 – September 2018 | Kansas City, KS

* Analyzed various traffic scenarios using Synchro, Vistro, Vissum, and HCS
* Compiled traffic analysis results into comprehensive reports for delivery to clients
* Performed calculations for various quantities including pavement markings, conduit, and traffic signals
* Designed sidewalk plans and profiles in AutoCAD per ADA requirements

PROJECTS

**SHEAR, MOMENT, & DEFLECTION CALCULATOR**

March 2021 | Harvard CS50 | [GitHub](https://github.com/lmizner/shear_moment_deflection_calculator)

* Built a web-based application allowing users to choose from 32 structural conditions, provide basic input variables for said condition, and, in return, receive shear, moment, and deflection solutions, along with a visual aid to add additional context to the user
* Utilized HTML, CSS, Python, and Flask

**CREDIT CARD VERIFICATION**

February 2021 | Harvard CS50 | [GitHub](https://github.com/lmizner/credit.git)

* Built a python program that prompts the user for a credit card number and reports whether it is a valid American Express, MasterCard, or Visa card number per the Luhn’s algorithm
* Implemented in Python using variable declaration, conditional statements, and loops

**SPELL-CHECKER**

January 2021 | Harvard CS50 | [GitHub](https://github.com/lmizner/spell-checker)

* Built a program in C that implements a spell checker by cross-checking words from a dictionary file with words from a user specified text file. Words not found in the dictionary will be returned to the user as misspelled words.
* Implemented in C using memory allocation, hash function, hash table, and linked lists