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 F_p 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

- 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

- 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

- 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