DOROTHEA FRENCH

dorothea.french@colorado.edu ⬦ (720)-234-2391 ⬦ https://github.com/DorotheaF ⬦ Boulder, CO

EDUCATION

Mechanical Engineering, BS	**GPA: 3.92/4.00**
Chinese Language and Culture, BA	Graduating May 2022

Computer Science, Minor
Linguistics, Minor
University of Colorado Boulder
Dean's List (all semesters), CU Esteemed Scholar-Sewell, Global Engineering Program, Maymester in China

SKILLS SUMMARY

Computing Languages	C++ & Java & Python (proficient), Scala & Javascript & MATLAB (basic)
Software & Tools	Solidworks (CSWA Certified), Meteor (React, Vue, Node.js, MongoDB), JIRA
Technical Skills	Full stack web development, software development, manufacturing & electronics
Languages	Mandarin Chinese (Advanced), Spanish (Intermediate), Thai (Beginner)
Transferable Skills	Research experience, Agile and DevOps experience, excellent written and oral communication, intercultural communications, critical thinking, logistics

ENGINEERING EXPERIENCE

Natural Language Processing (NALA) Group - Independent Study December 2020 - Present
· Trained several bilingual language models and compared their performance on English test sets, to learn about how grammatical knowledge from a primary language affects performance on a second
· Created an application to scrape and process targeted subtitles from YouTube videos
· Worked with a cross-disciplinary team to develop research and test methodologies, and analyze results
· Wrote research paper, and submitted to EMNLP

Laboratory of Atmospheric and Space Physics - Web Development Intern Oct. 2020 - April 2021
· Back-end web and systems development, using python and scala
· Collaborated on publishing and maintaining python package to detect anomalies in space data sets

Web Development at Northrop Grumman - Technical Intern June 2020 - July 2020
· Developed an interactive planning poker web app for agile teams, using the full-stack MeteorJS framework
· Coordinated virtually with agile team members to work efficiently and keep things organized

Autonomous Robotics and Perception Group - Undergraduate Member October 2019 - May 2020
· Programmed a POS tagger for use in multi-modal information processing research for autonomous robots
· Helped clean and maintain Amazon Mechanical Turk survey for human feedback on bi-modal data sets
· Designed, tested, and manufactured radio relays and their deployment mechanism for DARPA Sub-T challenge autonomous robots

Chinese Article Grader and Reading Assistant September 2019 - November 2019
· Built program to grade an article's reading level and allow users to create a library of articles and vocabulary
· Built user interface for Windows

Basic Natural Language Generator April 2019 - May 2019
· Built natural language processor that identified bigrams in a given document and used them to generate text

ADDITIONAL EXPERIENCE

Summer 2020 Design Intensive - Planning Committee Member May 2020 - June 2020
Society of Asian Scientists and Engineers - Planning Committee Member October 2018 - Present