Koppi Kolyvek

Software Engineer

CONTACT

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(206) 619 - 4889
Seattle, WA

EDUCATION

Cornell University
Bachelor of Science, College of Engineering, Class of 2019

TECHNICAL SKILLS AND LANGUAGES

JavaScript
HTML
CSS
Python

NodeJS
MATLAB

RELEVANT COURSEWORK

Time Series Data Analysis, Object Oriented Programming and Data Structures, Engineering Computation, Introduction to Computing

WORK EXPERIENCE

Computer Vision Engineer - Moosh Systems *May 2020 to Present*
Wellfleet, MA (Remote)

- Wrote image processing and object tracking software using Python and OpenCV to analyze drone footage and facilitate research of shark behavior off the coast of Cape Cod.
- Building an application to receive RTMP video streams from drones, edit and manipulate the footage in real time, and send the processed frames to live streaming services such as YouTube Live.
- As sole developer, responsible for researching and implementing all image processing methods to solve challenges and meet company goals.

Structural Engineer - PCS Structural Solutions *August 2019 to March 2021*
Seattle, WA

- Was responsible for taking client specifications and designing structural system solutions accordingly.
- Continually learned state of the art analysis methods to stay on top of the industry.
- Was a member of the process review team to find ways to update and improve company-wide design standards and procedures.

Consulting and Development Intern - Tuchschmid AG *June 2018 to August 2018*
Frauenfeld, Switzerland

- Wrote software that estimates welding time and monetary expenses based on varying user inputs.
- Quickly adapted to using unfamiliar structural engineering software to analyze various structures.
- Familiarized myself with standard project cost estimation procedure and single handedly delivered a cost package for an 85,000 USD project.
- Engaged in professional contact with clients and suppliers across Europe in both German and English.

Student Researcher - Cornell University Bovay Lab *June 2017 to May 2018*
Ithaca, NY

- Collaborated in a research group studying data collection and analysis, earthquake nucleation, and structural vibrations.
- Wrote MATLAB code extensively for data processing, analysis, and presentation.
- Wrote HTML code to display research results on the group's website.
- Created 3D structural models and performed eigenfrequency and implicit dynamic vibration analyses using finite element software.

PROJECTS

Video Analysis of Bridges

- Created a MATLAB tool to process high frame rate video files of high displacement pedestrian bridges and determine their modes of vibration.
- Written for and used by a Cornell University research group.

Machine Learning Impact Predictor

- Implemented a Naive Bayes classifier machine learning tool to predict impact locations of a cricket ball on the surface of a cricket bat.
- Developed testing and training data based on structural vibration physics.