

KUSHAL GOENKA

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EDUCATION

University of Illinois at Urbana-Champaign

Masters in Electrical and Computer Engineering (May 2021)

GPA: 3.96

- Coursework – Advanced Distributed Systems, Computer Vision, Autonomous Systems, Advanced Computer Security

Bachelor of Science in Computer Engineering (May 2020)

GPA: 3.50

- Dean's List, James Scholar, Eta Kappa Nu Honors Society (HKN)
- Coursework – Database Systems, Applied Machine Learning, Computer Architecture, Virtual Reality, Electronic Trading

WORK EXPERIENCE

CCC Information Services

Data Science Intern

Chicago, IL

January 2020 – August 2020

- Integrated and modified the open source Computer Vision Annotation Tool (CVAT) into the existing image annotation workflow
- Reduced the time to annotate images by 50% from 10 minutes per image to 5 minutes per image
- Created a preprocessing workflow in Python to combine a proprietary TensorFlow model with the Intel CVAT tool

AARP

Software Engineering Intern

Champaign, IL

May 2019 – August 2019

- Implemented NLP topic modelling and sentiment analysis methods to match users to executives within the organization
- Automated data retrieval and processing through scripts and built a Flask front-end app to serve results in an actionable format
- Saved over 250 hours of a senior executive's time every quarter while also allowing more robust and accurate results
- 1 of 3 finalists for the Most Competent and Collaborative team award, from over 600 students and 100 companies over the summer

OTCR

Technical Consultant

Champaign, IL

September 2017 – May 2020

- Conducted data analytics using Pandas and Tableau on client data to optimize staffing structure and payment model
- Collaborated as part of a team to research a go to market strategy for a startup based out of Chicago

PROJECT HIGHLIGHTS

Capstone Project – Schlumberger

Student Researcher for AI Modelling and Simulation Report Reviewer

Champaign, IL

January 2021 – May 2021

- Built a platform to analyze and automatically review and suggest corrections to PowerPoint reports generated after every experiment
- Saves about 1000 hours of time to peer review and suggest corrections to these Simulation Reports
- Deployed the service as a Web-Based Flask application on Google Cloud, or via a Docker container for internal use
- Integrated a third party spellchecking API and used techniques such as Part of Speech Tagging, and rule based filtering

Adaptive Cruise Control on GEM e2 Autonomous Vehicle Platform

Team Member

Champaign, IL

August 2020 – December 2020

- Used ROS to program and control the Polaris GEM e2 autonomous car and implement Adaptive Pedestrian Cruise Control
- Conducted sensor fusion using the Velodyne Lidar sensor and Camera to detect pedestrians, cars and dynamically control the vehicle

PinPoint – Seat Finder Platform

Team Lead

Champaign, IL

January 2019 – May 2019

- Designed an IoT platform using a Raspberry Pi for use by students in lecture halls and libraries to identify vacant seats
- Utilized OpenCV and implemented the YOLO algorithm in PyTorch for bounding box object detection

Fridge to Table – Recipe Matching Platform

Team member

Champaign, IL

August 2018 – December 2018

- Created a web platform using JavaScript to allow users to find recipes according to ingredients in their fridge
- Set up a MySQL database to query results, recipes and implemented a matching algorithm to provide optimum results

SKILLS

Proficiency in: Flask, MySQL, MongoDB, Python (Pandas, TensorFlow, PyTorch), C, C++ , CUDA, Docker, JavaScript, GCP

Interests in: Squash, NBA, Photography, Formula 1, Coffee