Sushmita Kadarla

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EDUCATION

Masters in Civil and Urban Engineering September 2021 – May 2023
New York University New York City, United States
Minor: Construction Project Management

Bachelors in Civil Engineering August 2017 – June 2021 | Hyderabad, India
Mahindra University

SKILLS

Autodesk Revit | Autodesk AutoCAD | ArcGIS | Autodesk Civil 3D | STAAD PRO | ANSYS | SYNCHRO | Google Earth
MicroStation | Microsoft Project | Machine Learning | Tableau | OnScreen Takeoff | Primavera P6 | Unity | C | MATLAB
Python | Bluebeam | Google Suite | Microsoft Dynamics CRM

PROFESSIONAL EXPERIENCE

Civil Engineering Intern (CONNECTIONS AND PERMITTING) January 2023 – present | New York, United States
NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION
- Reviewed and certified site connection proposals and designs for stormwater management based on the Unified Stormwater Rule.
- Performed hydraulic analysis, and collaborated with engineers, and government officials, to ensure timely, accurate review and certification of site connection proposals and designs for stormwater management.
- Maintained accurate and detailed records of site connection proposals and designs.

Intelligent Transportation Systems Intern May 2022 – December 2022 | New York, United States
NEW YORK CITY DEPARTMENT OF TRANSPORTATION
- Re-formatted, managed, and calculated Transit Signal Priority summary and analysis reports from inception to current, utilizing skills in ArcGIS, Synchro, Google Earth and Google Maps, Tableau, and Pivot Tables in MS Excel.
- Proposed and analyzed truncation times data for over 300 intersections, resulting in improved efficiency and reduced congestion on MTA bus routes.
- Prepared a balanced volume network for non-signalized missing stop control intersections and proposed traffic volume using a flow diagram, improving traffic safety and efficiency.

3D Model Enhancement Intern | Transportation modeler February 2022 | New York, United States
Building Informatics and Visualization Lab (BiLAB), New York University
- Utilized Revit and AutoCAD to create 3D models for VR simulations, ensuring realistic and accurate representations of urban environments.
- Utilized C# to develop custom tools and scripts to automate repetitive tasks and increase efficiency in the 3D modeling process.
- Leveraged expertise in SUMO, Steam VR, and Unity to create immersive and interactive VR simulations for training and educational purposes.

Smart Infrastructures Intern March 2021 – July 2021 | Suwon, South Korea
SUNGKYUNKWAN UNIVERSITY
- Developed a Building/Structural damage detection method using Augmented Reality to promote nondestructive testing and monitoring for smart infrastructures, resulting in increased efficiency and reduced costs for building maintenance and repair.
- Created 3D models in Revit to integrate with Microsoft HoloLens, enabling real-time visualization of building structures and facilitating the detection of structural damage using AR technology.
- Leveraged expertise in Augmented Reality, Revit, and Microsoft HoloLens to create innovative solutions for smart infrastructures, resulting in increased accuracy and reduced downtime for building maintenance and repairs.

Structural Health Monitoring Intern May 2019 – August 2019 | Ulsan, South Korea
ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY
- Monitored the displacement of a bridge using LIDAR and collected its coordinates, providing accurate and reliable data on long-term structural changes due to various loads and environmental factors.
- Conducted structural health monitoring of a Cable Stayed Bridge using an Accelerometer Sensor to find tension, enabling real-time detection and analysis of any changes in structural integrity.
- Utilized expertise in LIDAR, Accelerometer Sensors, and other monitoring technologies to design and implement innovative solutions for structural health monitoring, resulting in improved safety and longevity of bridges and other critical infrastructure.

PUBLICATIONS

ECCENTRICALLY BRACED FRAMES
GLOBAL JOURNAL OF ENGINEERING SCIENCE AND RESEARCH

CRACK DETECTION AND PROPAGATION THROUGH A VIDEO FOOTAGE USING MACHINE LEARNING
SPRINGER INTERNATIONAL

STRUCTURAL DAMAGE IDENTIFICATION FROM VIDEO FOOTAGE USING ARTIFICIAL INTELLIGENCE
SPRINGER INTERNATIONAL

PROJECTS

RESEARCH ON PREDICTION AND ANALYSIS OF TRAVEL CHOICE
Researched on predicting travel mode choice analysis using machine learning and compared it with traditional logit , multinomial and cross nested models, and ML models using simulation software.

PROFESSIONAL MEMBERSHIPS

Student Memeber (American Society of Civil Engineers) | **Student Member** (Institute of Transportation Engineers)