

# Oscar Poudel

Ph.D. in Civil Engineering specialization in Construction  
Automation with AI and Robotics Systems

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## RESEARCH INTEREST

- Human Robot Interaction for construction robotics
- Structural Health Monitoring using ubiquitous systems
- AI (LLMs/DL/RL) for Civil Engineering application and system optimization

## EDUCATION

- |             |                                                                                                                                                              |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2017 - 2022 | PhD: Civil Engineering<br>New Jersey Institute of Technology, Newark, USA <ul style="list-style-type: none"><li>• Grade: 4/4</li></ul>                       |
| 2017 - 2022 | Bachelors: Civil Engineering<br>Institute of Engineering, Pulchowk Campus, Lalitpur, Nepal <ul style="list-style-type: none"><li>• percentage: 82%</li></ul> |
| 2014 - 2016 | High School/+2: Science (Biology)<br>St. Xavier's College, Maitighar, Kathmandu <ul style="list-style-type: none"><li>• percentage: 86%</li></ul>            |

## TECHNICAL SKILLS

- Modeling and Design : ETBAS, SAP, SAFE, PERFORM3D, Robot, RCDC, Idea Statica, Civil 3D, OPENSEES, Grasshopper
- Drafting, rendering and BIM : Revit, Autocad, Sketchup , Lumion
- Mapping : QGIS, SNAP
- Project Management : Microsoft Project, Primavera
- General Purpose : Microsoft Office, Windows and Linux systems
- Programming : Python ( software automations , AI, ML, Data science etc.),  
MATLAB/R (general computing, Plotting), JAVASCRIPT (Websites, Webapps,  
Apis etc.) , FLUTTER (Android apps) , C/C++, SQL (Databases)

## RESEARCH AND PROJECT

2022	Senior Year Project <ul style="list-style-type: none"><li>Performed Modelling and Structural Analysis of a 8 storied commercial building using ETABS</li><li>Carried out seismic resistant design and prepared structural drawings of different elements using AutoCAD ( Using both IS as well as NBC standards)</li></ul>
2022-	Seismic performance study in irregular Building (Ongoing)
2022-	Earthquake Recovery Study using RS and GIS techniques ( Ongoing )
2021-2022	Designed and developed website for <a href="#">CESS - Nepal</a>
2019	Conducted a energy consumption survey in Myagdi District for Addon Engineering Consultancy

## PROFESSIONAL EXPERIENCE

2023(Sep)-	New Jersey Institute of Technology <ul style="list-style-type: none"><li>Research Assistant/ Teaching Assistant</li></ul>
2022 (Sep) -2023(May)	Hatemalo Engineering & Construction Pvt. Ltd. <ul style="list-style-type: none"><li>Structural Engineer</li></ul>
2022 (Aug-Nov)	MRB & Associates, Jamal <ul style="list-style-type: none"><li>Junior Structural Engineer</li></ul>

## LEADERSHIP

2021 - 2022	Secretary of 15 <sup>th</sup> committee of Civil Engineering Student's Society <ul style="list-style-type: none"><li>Organized and moderated several webinars and training programs</li><li>Organized and Managed numerous competitions</li></ul>
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## PROFESSIONAL CERTIFICATE

2022-	Nepal Engineering Council ( Category "A" 32803)
2021 -	American Concrete Institute <ul style="list-style-type: none"><li>Student Member</li></ul>