

# ANDREA WAN

+15102036513 • andreawa@andrew.cmu.edu • <https://www.linkedin.com/in/wan-andrea/> • Pittsburgh, PA

## Experience

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Carnegie Mellon University<br><i>Teaching Assistant – Fundamentals of Computational Design</i>                                                                                                                                                                                                                                                                                                                                                                                                  | Pittsburgh, PA<br>01/2025 – Present |
| <ul style="list-style-type: none"><li>• Led recitations and office hours</li><li>• Assisted with grading</li></ul>                                                                                                                                                                                                                                                                                                                                                                              |                                     |
| Promantus<br><i>Data Analyst, Intern</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Remote<br>05/2022 – 08 /2022        |
| <ul style="list-style-type: none"><li>• Worked with the WELL Building Standard backend team</li><li>• Designed a working prototype of a data visualization pipeline, starting from data cleaning, wrangling, and querying to live, interactive dashboard display</li><li>• Utilized knowledge of SQL, Python, HTML, CSS, and Javascript</li><li>• Used pandas, Altair, Vegas-Lite.js, Vega.js, and D3.js libraries</li><li>• Created interactive and web-embeddable charts and graphs</li></ul> |                                     |
| Carnegie Mellon University<br><i>Outreach Instructor</i>                                                                                                                                                                                                                                                                                                                                                                                                                                        | Pittsburgh, PA<br>02/2022 – 05/2022 |
| <ul style="list-style-type: none"><li>• Created and delivered curriculums for K-12 Saturday programs, working with children of various ages to introduce architectural concepts through fun crafts and activities</li></ul>                                                                                                                                                                                                                                                                     |                                     |
| Williams + Paddon<br><i>Architecture Intern</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Roseville, CA<br>10/2019 – 12/2019  |
| <ul style="list-style-type: none"><li>• Made revisions to specifications for building materials, construction materials and other project details in Revit and AutoCAD</li><li>• Assisted in 3D modelling, texturing and interior design and visualization tasks in Sketchup and Enscape</li></ul>                                                                                                                                                                                              |                                     |

## Education

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Carnegie Mellon University<br><i>Bachelor of Architecture (B.Arch)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Pittsburgh, PA<br>08/2020 – Expected 2025 |
| <ul style="list-style-type: none"><li>• <b>Fundamentals of Programming</b>, a computer science course centered on Python</li><li>• <b>Principles of Imperative Computation</b>, a computer science course using C</li><li>• <b>Introduction to Machine Learning in Design</b>, an architecture course centered on ML algorithms for generative approaches</li><li>• <b>Data Visualization</b>, a data science course using Python libraries and Esri GIS software for mapping and interactive visualizations</li><li>• <b>Generative Modelling and Advanced Scripting</b>, courses centered on the use of Grasshopper and Python to implement computational design approaches</li></ul> |                                           |
| Architectural Association<br><i>Spring Visiting School Programme</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | London, UK<br>01/2024 – 05/2024           |
| University College London<br><i>Summer School – Contemporary Urbanism, Culture, and Space</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | London, UK<br>07/2023 – 08/2023           |

## Projects

- |                                                                                                                                                                                                                                                                                                                |                                      |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Carnegie Mellon<br><i>Independent Study</i>                                                                                                                                                                                                                                                                    | Pittsburgh, PA<br>05/2024 – 08 /2024 |
| <ul style="list-style-type: none"><li>• Used Python, sci-kit learn and PyTorch machine learning libraries in conjunction with Rhino 3D to create a training dataset and develop an ML model to predict line weights in 2D CAD drawings from normal map images</li></ul>                                        |                                      |
| Carnegie Mellon<br><i>STEAM Center of Learning</i>                                                                                                                                                                                                                                                             | Pittsburgh, PA<br>05/2024 – 08 /2024 |
| <ul style="list-style-type: none"><li>• Building systems integration studio – utilized Rhino and Grasshopper for 3D modelling, including an innovative responsive façade; ClimateStudio and Grasshopper for environmental simulations; 3D model of MEP systems using ArchiCAD; rendering using V-Ray</li></ul> |                                      |

## Skills

AutoCAD • D3.js • Fusion • Maya • Pandas • Python • Revit • Rhinoceros 3D • SQL • V-ray • Grasshopper • JavaScript • Twinmotion • Revit • 3ds Max • SketchUp • ArchiCAD MEP