

Peitao Xu (Ewan Hsu)

84 Daleview Cres, London ON, Canada, N5X 1H1

☎ 548-888-6071

✉ p_xu213469@fanshaweonline.ca

🌐 www.linkedin.com/in/peitaouxu

HIGHLIGHTS OF QUALIFICATIONS

- Achieved Academic Excellence (overall A) and named to The Dean's Honour Roll of Fanshawe College.
- Passionate about creating maps, and achieved Certificate of Top Prize in GIS Days Map Gallery Awards.
- More than four years' working experience in the field of Civil Engineering, including Urban Data Analysis, Data Visualization, Architecture and Structural Design, BIM Modeling, and Structural Analysis.
- More than ten years' educational and academic experience, and published 11 academic research papers and 5 patents, primarily focused on green construction and sustainable design in prefabricated buildings.
- Master a variety of engineering & design software, such as AutoCAD, ArcGIS Pro, Adobe, MS Office, etc.
- Experience in completing assignments of the GIS program using SQL, C# and Python with high grades.
- Quick learner with excellent interpersonal and written communication skills in English, Mandarin.

EDUCATION

Fanshawe College (London, Ontario. CA) Sept.2023 – Apr.2024 (Expected)

Graduate Certificate *Geographic Information Systems (GIS) / Co-op Program* GPA: 4.15 / 4.2

Relevant Courses: Fundamentals of GIS (ArcGIS Pro), Spatial Data Acquisition, Remote Sensing, Information Systems (SQL), Advanced Analysis in GIS (Python, QGIS), Advanced Programming (C#), Web GIS (HTML, JavaScript).

Wuhan University of Technology (Wuhan, China) Sept.2015 - Jun.2018

Master of Engineering *Civil Engineering* GPA: 3.65 / 4.0

Relevant Courses: Matrix Theory, Equations of Mathematical Physics, Finite Element Analysis and Program Design.

Wuhan University of Technology (Wuhan, China) Sept.2011 - Jun.2015

Bachelor of Engineering *Civil Engineering* GPA: 3.36 / 4.0

Relevant Courses: Building Architecture, Construction Project Budget and Management, Engineering Geology.

EXPERIENCE

Urban Data and Machine Learning Workshop Oct.2023 - Dec.2023

GIS Analyst / Data & Visualization Specialist Online

- Participated in a three-member remote collaborative team, responsible for **utilizing Python, SPSS, Illustrator and ArcGIS for data collection, qualitative & quantitative analysis and visualization** through survey and experiment.
- **Investigated the relationship** between advertisements, social activities, and population within a commercial district in Shanghai using a series of maps. **Developed conceptual designs** for XR ads for sustainable urban planning in future.

Fujian Construction Engineering Prefabricated Building Research Institute Jan.2022 - Mar.2023

Structural Engineer / Prefabricated Building Consultant Fuzhou, China

- **Reviewed and assessed over 1k documents and BIM models** concerning prefabricated buildings in Fuzhou. Led to compilation of investigation reports outlining trends, challenges, and opportunities in urban building informatization.
- **Conducted descriptive statistical analyses** on data related to prefabricated buildings and **devised a development plan** aimed at enhancing the use of information technology in **green construction of prefabricated buildings**.
- **Conducted experimental research and FEA analysis** on a new construction method involving large-span precast floor system with formwork-free and scaffolding-free technique, leading to sustainable materials and energy-efficient design.

- Participated in Green Construction Research in a four-member team, **responsible for the detailed design drawings, experiment, and Finite Element Analysis (FEA) analysis** of prefabricated pile caps, completed 1 paper and 1 patent.
- **Developed and completed research proposal about** Prefabricated Lattice Girder Floor Slabs System, **carried out numerical analysis and experimental research**, completed 3 papers, the results were adopted by Government.
- **Designed structural construction drawings** of 10 projects such as Dadian Liquor Brewing Cultural Center, *Nanping No.1 Middle School*, *Asia-pacific Plaza of Philippines* and the *CBK tower (Central Bank of Kenya)*, etc.
- **Designed shop-drawings** of more than 20 projects such as *Fujian Provincial Maternity Hospital*, *Fujian Academy of Agricultural Research Building*, *Rental Housing Project of Coastal City*, and some real estate projects, etc.
- Participated in **the compilation of 5 provincial standard atlases**, including "*Technical Standard for concrete composite slab with lattice girders in Fujian*", "*Prefabricated Internal Partition Wall Technical Specification*", etc.
- Utilized SmartPart programming language to **develop a precast component modeling program** based on ALLPLAN. The results were implemented in daily work in 2020, benefiting several projects and significantly improving efficiency.

AWARDS AND CERTIFICATES

Achieved Academic Excellence and Named to The Dean's Honour Roll of Fanshawe College	2023
Awarded Certificate of Top Prize in GIS Days Map Gallery Awards	2023
Professional Qualification Certificate of Building Structure Intermediate Engineer	2020
Registered Qualification Certificate of Associate Constructor	2018
Practicing Certificate of BIM Modeling Technical Engineer	2018
Recipient of Wuhan University of Technology (WHUT) Annual Scholarships every year	2013-2018
Certificate of Wuhan 2017 Yangtze River Crossing Race	2017
Awarded Certificate of Top Prize in University-level Graphic Design Competition	2017
Multiple Top-2 Awards in Campus Swimming Competitions of WHUT	2013-2017

SKILLS AND INTERESTS

Tools: ArcGIS, SQL, C#, Python, AutoCAD, Revit, Rhino, Tekla, ABAQUS, Sap2000, Origin, Adobe PS/AI/PR, Office.

Work Skills: Data acquisition and analysis, Mapping, Data visualization, Model building, Structural calculation.

Soft Skills: Reports and papers, Time management, Leadership and teamwork, Project management, Innovative thinking.

Interests: Swimming, Hiking, Pets, Photography, Graphic Design, Podcast, Marathon, Traveling.

LEADERSHIP AND VOLUNTEERING

Fanshawe International	<i>Jan.2024 - Present</i>	Digital Ambassador
<ul style="list-style-type: none"> • Responsible for promoting Fanshawe to prospective students, using online channels to providing valuable insights and answering questions about study and campus, serving as a bridge between college and students 		
2023 Fall Open House of Fanshawe College	<i>Oct.2023</i>	Student Volunteer
<ul style="list-style-type: none"> • Actively engaged in assisting with inquiries, offering logistical support and guidance for students and parents. 		
Wuhan LGBTQ+ Center	<i>Oct.2016 - Dec.2018</i>	Events Volunteer & Designer
<ul style="list-style-type: none"> • Actively volunteered in organizing LGBTQ+ community events, facilitating discussions on gender diversity, and leading educational initiatives, and offered support to foster a more inclusive environment and society. • Managed publicity campaigns and authored articles about human rights to raise awareness and encourage constructive dialogue. Continuously contributed by providing ongoing support and regular donations till now. 		
WHUT Graduate Student Union	<i>Sept.2015 - Sept.2017</i>	Vice President
<ul style="list-style-type: none"> • Responsible for organizing and managing activities, led the union to secure first award and earning the title of the Outstanding Student Union. Produced the 'Instant Chats' campus video program with over 15K views. 		