

# Carlos Arturo Osorio Sandoval

Curriculum vitae

January 2022

## Education

2021	<b>PhD in Civil Engineering</b> Thesis: "BIM-based construction simulation modelling"	<i>University of Nottingham</i>
2015	<b>MEng in Construction Engineering &amp; Management</b> Thesis: "Impact of labour absenteeism on construction activities runtime in housing projects"	<i>Autonomous University of Yucatan</i>
2012	<b>Civil Engineering</b>	<i>Autonomous University of Yucatan</i>

## Teaching experience

2022–Present	<b>Assistant Professor</b> <i>Modules:</i> Building Information Modelling Group Design Project ( <b>Convenor</b> )	<i>University of Nottingham</i>
2018–2020	<b>Graduate School Teaching Affiliate</b> <i>Modules:</i> Further presentation skills for researchers	<i>Graduate School - University of Nottingham</i>
2016–2020	<b>Demonstrator</b> <i>Modules:</i> Testing of fundamental material properties, Introduction to building information modelling, Further building information modelling, Project planning, BIM Group design project, Construction project management 1	<i>University of Nottingham</i>

## Professional associations

2013	<b>Mexican Professional Engineering License</b> Number: 8041013
2020	<b>Graduate Member of the Institution of Civil Engineers (GMICE)</b> Membership reference: 93546289 Working towards full membership as Chartered Engineer
2020	<b>Fellow of the Higher Education Academy (FHEA)</b> Fellowship reference: PR188502

## Other qualifications

February 2019	<b>Preparing to Teach in Higher Education Certificate</b> Awarded by the University of Nottingham.
---------------	-------------------------------------------------------------------------------------------------------

## Work experience

2022–Present	<b>Assistant Professor in Construction Management</b> <i>Key responsibilities:</i> Identify, conduct and lead original research; supervise postgraduate research students conducting original research; lead and support the development and delivery of content in the Construction Management thematic area; supervise final year undergraduates and taught postgraduates conducting individual projects.	<i>University of Nottingham</i>
2020–2021	<b>Research associate - BIM Risk Library</b> <i>Key responsibilities:</i> Develop, design and deliver tools and techniques for industry in the area of BIM and construction health and safety improvement.	<i>University of Manchester</i>
2018–2020	<b>Resident tutor at Rutland Hall</b> <i>Key responsibilities:</i> To provide all-round practical support to resident students and assist the Warden in the welfare, pastoral care and social needs of the students by promoting discipline and the observation of health and safety and other University regulations.	<i>University of Nottingham</i>
2018–2019	<b>Graduate centre coordinator</b> <i>Key responsibilities:</i> To provide support to the Researcher Training and Development Managers and postgraduate students at one of the Graduate School's Graduate Centres by promoting the Centre, ensuring a regular daily presence at them, dealing with general student queries, supporting local events, activities and Faculty training programmes and ensuring that the facilities are maintained to a high standard.	<i>University of Nottingham</i>
2012–2016	<b>Cost engineer</b> <i>Key responsibilities:</i> Preparing construction programmes and cost estimates, planning and controlling project costs, preparing customer billing processes, resolving issues to ensure the delivery of projects.	<i>Qyder Construcciones, S.A. de C.V</i>
2011–2012	<b>Supervision manager</b> <i>Key responsibilities:</i> Coordinating supervisors for various construction projects within the city, monitoring project progress.	<i>Imadico, S.A. de C.V.</i>
2010–2011	<b>Construction site manager</b> <i>Key responsibilities:</i> Supervising contracted staff, meeting and coordinating subcontractors, preparing site reports, problem solving in various construction projects in the Yucatan State.	<i>APM Constructores</i>
2009–2010	<b>Assistant construction site manager</b> <i>Key responsibilities:</i> Assisting with project management activities in highway overpass projects in the Yucatan State.	<i>Delsa Constructor, S.A. de C.V.</i>

## Conferences and seminars

October 2021	Data-driven Insights Webinar: Discover new data solutions from HSE that help you solve your health and safety challenges <i>Online</i> Presentation title: "Construction Risk Library".
July 2021	XVIII Symposium of Mexican Studies and Students in the UK <i>Online</i> Presentation title: "BIM-Based construction safety risk knowledge base for prevention through design".
January 2021	CSEI Seminar series <i>Online</i> Presentation title: "Piloting a new safety BIM tool for industry: data management challenges and opportunities".
August 2020	ICCCBE/CIB W78 Virtual Joint Conference <i>Online</i> Paper title: "Discrete-event simulation and building information modelling based animation of construction activities".
April 2020	CSEI Seminar series <i>Nottingham, United Kingdom</i> Presentation title: "A framework to integrate building information modelling and discrete event simulation".
May 2019	Engineering Research Showcase 2019 <i>Nottingham, United Kingdom</i> Presentation title: "Practice makes perfect: Virtual construction projects".
February 2019	CSEI Seminar series <i>Nottingham, United Kingdom</i> Presentation title: "Building information modelling and discrete event simulation based serious gaming for construction management education".
June 2018	17 <sup>th</sup> International Conference on Computing in Civil and Building Engineering <i>Tampere, Finland</i> Paper title: "Integration of building information modelling and discrete event simulation within a game engine". (Presented by co-author)
May 2018	Engineering Research Showcase 2018 <i>Nottingham, United Kingdom</i> Poster title: "BIM-based serious gaming for construction management education".
January 2018	CSEI Seminar series <i>Nottingham, United Kingdom</i> Presentation title: "Building information modelling based serious gaming for construction management education".
July 2017	24 <sup>th</sup> EG-ICE International Workshop on Intelligent Computing in Engineering <i>Nottingham, United Kingdom</i> Paper title: "Computer technology for serious games in education: A literature review".
October 2014	8vo. Congreso Internacional en Administración y Tecnología para Arquitectura, Diseño e Ingeniería <i>Mexico city, Mexico</i> Paper title: "Determinación del impacto del ausentismo de la mano de obra sobre el tiempo de ejecución de las actividades de construcción de vivienda".

## Funding

2020	<b>Graduate School Travel Prize</b> Awarded by the University of Nottingham to attend the ICCCB/E/W78 joint conference. (Changed to virtual format amid COVID-19)
2019	<b>Postgraduate Research Experience Fund</b> Awarded by the University of Nottingham to organise the conference "Academic public engagement on YouTube".
2018–2019	<b>Beca Complemento de Apoyo al Posgrado</b> <i>Scholarship for PhD studies</i> Awarded by the Mexican Ministry of Public Education.
2016–2020	<b>Conacyt al extranjero 2016</b> <i>Scholarship for PhD studies</i> Awarded by the Council of Science and Technology, Mexico to carry out PhD studies in The University of Nottingham.
2011	<b>PIMES Spring 2011</b> <i>Scholarship for international mobility</i> Awarded by the Autonomous University of Yucatan to study a semester in the National University of Cordoba, Argentina

## Languages

Spanish	Native speaker
English	C1 (IELTS 7.5 2015)
French	A1
Russian	Limited

## Software and programming languages

BIM	Revit, Robot, 3D Repo, Navisworks, IDEA Architecture, Ecotect Analysis
Design	Autocad, G-StarCad
Cost engineering	Neodata PU2012, Opus, Sinco-Wifi
Project mgmt.	Microsoft Project, ProjectLibre
Statistics	MiniTab, EasyFit, SPSS
Simulation	Simphony.net
Game engine	Unity
Programming	C#, Visual basic, Delphi, JavaScript

## Other activities

2021-Present	Member of commissions W78 and W099 of the International Council for Research and Innovation in Building and Construction (CIB)
2020-Present	Member of the BIM 4 Health & Safety Working group
2019-2020	Member of the organising committee of the XVIII Symposium of Mexican Studies and Students in the UK
2019	Participated in the Ingenuity19 programme, a forum for entrepreneurs and community innovators to come together to explore key challenges facing society
2017–2020	Postgraduate Research Engineering Community (PREC) representative for the Centre for Structural Engineering and Informatics
2017–2018	Treasurer of the Mexican Society of the University of Nottingham