

Johann J. Cárdenas

MS IN CIVIL ENGINEERING · PHD STUDENT

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“Believe you can, and you are halfway there.”

Education

University of Illinois, Urbana-Champaign

PHD. IN CIVIL ENGINEERING

- GPA: 4.0/4.0

Illinois, USA

May. 2023 - May. 2027

University of Illinois, Urbana-Champaign

M.S. IN CIVIL ENGINEERING

- Recipient of a Fulbright Scholarship, awarded to highly-qualified professionals. GPA: 4.0/4.0

Illinois, USA

Aug. 2021 - May. 2023

Universidad Nacional Mayor de San Marcos (UNMSM)

B.S. IN CIVIL ENGINEERING

- Highest-ranked student of the class (1/39).

Lima, Peru

Mar. 2011 - Jul. 2016

Profesional Development

Universidad de Ingeniería y Tecnología (UTEC)

SPECIALIZATION PROGRAM IN PAVEMENT ENGINEERING

- Recipient of the Academic Excellence Award. GPA: 19.0/20.0

Lima, Peru

Nov. 2020 - Jul. 2021

ESAN Graduate School of Business

INTERNATIONAL DIPLOMA IN PROJECT MANAGEMENT

- Highest-ranked student of the class (1/62). GPA: 17.6/20.0

Lima, Peru

Feb. 2020 - Set. 2020

Skills

Software	ABAQUS, AutoCAD, Civil 3D, Power BI, Primavera P6, MS Project, SAP2000, ETABS
Programming	Python, Matlab, R, LaTeX
Languages	Spanish (Native), English

Research Experience

Illinois Center for Transportation (ICT)

GRADUATE RESEARCH ASSISTANT

- Conducted numerical simulations to predict the behavior of flexible pavement structures using advanced FEM Modeling.
- Performed parametric studies to investigate the effect of tire geometry and properties on the tire-pavement contact stress distribution.
- Calibrated mechanistic models to predict the dynamics of Heavy Duty (HD) vehicles.

Illinois, USA

Aug. 2021 - Present

Impact of Commercial Electric Vehicles on Flexible Pavement Performance

Aug. 2022 - Present

Building Machine-learning-based Prediction Models for Computationally Efficient Airfield Pavement Analysis

Aug. 2011 - Present

Work Experience

CONCAR S.A

ENGINEER (TECHNICAL OFFICE)

- Project Type: Road Construction, Management & Operation
- Managed formulation, approval and execution of additional work with the client.
- Issued monthly project operational and performance reports to the Project Control Office.
- Selected, hired, monitored and dealt with subcontractors and suppliers.
- Elaborated annual budget plan and annual planning dossier.

Lima, Peru

Jan. 2019 - Mar. 2021

FLESAN DEL PERU S.A.C

ASSISTANT ENGINEER (TECHNICAL OFFICE)

Lima, Peru

Jul. 2018 - Dec. 2018

- Project Type: Foundations and Anchored Walls Construction for a Retail Store.
- Reviewed engineering drawings and issued requests for information reports (RFI's) to the Project Management Office.
- Formulated project additional and deductive budgets.
- Issued weekly progress reports ("S" Curve) to the client.
- Developed an integrated log to update project drawings modifications, to avoid reworks and wastes.

CONCAR S.A.

ASSISTANT ENGINEER (TECHNICAL OFFICE)

Apurimac, Peru

Aug. 2017 - Jun. 2018

- Project Type: Management and Conservation by Service Levels of a Road Corridor
- Controlled and monitored productivity rates of manpower, equipment, and materials on a road surface treatment project.
- Reported daily project cost status to the Project Manager and disseminated results among the project team.
- Elaborated progress reports ("S" Curve) and aggregate cost reports.
- Generated and issued project services orders to subcontractors and suppliers.

CONCAR S.A.

TRAINEE ENGINEER (TALENT DEVELOPMENT PROGRAM)

Apurimac, Peru

Jan. 2017 - Jul. 2017

- Project Type: Management and Conservation by Service Levels of a Road Corridor
- Processed field-collected productivity data and kept track of planning schedule.
- Controlled and monitored productivity rates of manpower and equipment on a service level road management and operation project.
- Generated and issued project service orders to subcontractors and suppliers.
- Identified bottlenecks in the road construction process. Prepared and proposed a solution to the Top Management as the final deliverable of the program. Shortly after, I was invited to join the company.

Extracurricular Activity

Fulbright Student Association at the University of Illinois

PRESIDENT

Illinois, USA

May. 2022 - Jul. 2023

- Organized networking, professional and social activities for the Fulbright grantess.

ASCE Transportation & Development Institute, Graduate Student Organization

MEMBERSHIP DIRECTOR/INTERNAL COMMUNICATIONS CHAIR

Illinois, USA

Aug. 2021 - May. 2023

- Oversaw and coordinated internal communication strategies, disseminated information about academic and social events.
- Oversaw recruitment, retention and engagement of members. Managed member databases and records and proposed retention programs to ensure existing members remain active.

Peruvian Student Association at the University of Illinois

MEMBER

Illinois, USA

Aug. 2022 - May. 2023

- Developed engagement strategies to involve the Champaign-Urbana community in cultural activities to spread the Peruvian traditions.

Project Management Institute (PMI), Lima Chapter

MEMBER

Lima, Peru

Aug. 2020 - Aug. 2021

- Volunteered to organize professional events. Participated in the mentoring program as a mentee.

Colegio de Ingenieros del Peru (Peruvian Association of Engineers)

MEMBER

Lima, Peru

Nov. 2020 - Present

- Registered Engineer, CIP N°252041.

Estructuras UNMSM

PRESIDENT/FOUNDER

Lima, Peru

Mar. 2014 - Jul. 2020

- Initiated and led an undergraduate research organization focused on social projects, academic events, and intercollege activities.

Honors & Awards

ACADEMIC

2021	Grantee , Fulbright Foreign Student Scholarship	Lima, PERU
2021	Recipient , UTEC Academic Excellence Certificate	Lima, PERU
2020	Grantee , UTEC Pavement Engineering Scholarship	Lima, PERU
2020	Recipient , ESAN Academic Excellence Certificate	Lima, PERU
2016	Recipient , UNMSM Academic Excellence Certificate	Lima, PERU