# Mateo Carvajal
## M.Sc. in Civil Engineering

Civil Engineer with a master's degree in Pavements Engineering and over 5 years of field and research experience

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## WORK EXPERIENCE

### Staff Civil Engineer - Pavement Condition Consultant
Applied Research Associates, Inc.

*01/2019 – Present*      *Gainesville, FL*

- On-site Pavement Condition Consultant Engineer supporting ARA's Pavement Performance Consultant Services contract with the Florida Department of Transportation (FDOT) State Materials Office (SMO).
- Develop and maintain applications to facilitate the process of collection, analysis, and interpretation of more than 19,000 miles of pavement condition data with quality assurance purposes. Report data yearly to FHWA.
- Provide data collection assignments to technicians.

### Graduate Research Assistant
University of Nevada, Reno

*08/2017 – 12/2018*      *Reno, NV*

- Conducted Advanced Laboratory testing. Analyzed and summarized data in monthly/quarterly reports.
- Assisted in the accreditation process of the Western Regional Superpave Center (WRSC) laboratory at UNR.

### Staff Engineer
National Roads Institute (INVIAS)

*11/2016 – 08/2017*      *Popayan, Colombia*

- Identified the needs in terms of construction, rehabilitation, maintenance and conservation of the infrastructure in charge.
- Executed contracting process for low bid projects.

### Junior Engineer
University of Cauca

*02/2015 – 08/2017*      *Popayan, Colombia*

- Determined the damage to flexible pavement structures attributed to the super-heavy load vehicles designed for cane transportation in Colombia.
- Analyzed and processed data obtained with Falling Weight Deflectometer (FWD) and Ground Penetrating Radar (GPR).
- Conducted pavement analysis and design with software AASHTOWare Pavement ME.

## EDUCATION

### M.Sc. Civil Engineering
University of Nevada, Reno

*08/2017 – 12/2018*      *Reno, NV ~ GPA: 3.9/4.0*

### B.Sc. Civil Engineering
University of Cauca / Colombia

*08/2009 – 02/2015*      *Popayan, Colombia ~ GPA: 4.0/5.0*

## TECHNICAL SKILLS

**Pavements Software Skills**
ICC Connect, AASHTOWare Pavement ME, PAVER, 3D-Move Analysis, ILLI-PAVE, MODULUS, Rhea.

**Autodesk Solutions**
AutoCAD, Civil 3D.

**Coding**
VBA, Python, MATLAB.

**Statistical Packages**
SPSS, R, Minitab.

**Microsoft Suite**
SQL, Word, Excel, PowerPoint, Access.

## SKILLS

- Pavement Analysis and Design
- Pavement Management Systems
- Data Reduction and Analysis
- Non-destructive Data Analysis
- Back-calculation
- Life-Cycle Cost Analysis
- Problem Solving

## CERTIFICATES

- Fundamentals of Engineering (EIT) (11/2018)
- American Society of Civil Engineers (ASCE) (Member since 2018)

## LANGUAGES

English      Spanish