# ANDRES PENA

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## SUMMARY

Front-end web developer leveraging a background in transportation engineering to provide unique perspectives on how websites and software platforms can help cities and companies move more efficiently, safely, and fairly. Integral problem-solver who is looking to develop apps for companies and cities that help them move more safely, efficiently, and fairly. Strengths in creativity, teamwork, and building projects from ideation to execution.

## TECHNICAL SKILLS

JavaScript ES6+, CSS3, HTML5, SQL, NoSQL, GitHub, MongoDB, MySQL, Express, React, Node, Bootstrap, Figma, Photoshop, AutoCAD, Illustrator

## PROJECTS

**Fitness Tracker** | https://github.com/aj-pena/Fitness-Tracker.git | https://fitness-tracker-apj.herokuapp.com/
- Summary: Served as the sole author for this application that allows users to track their workouts and progress.
- Tools: Express, NodeJs, NoSQL, Robo 3T, JavaScript, ORM, Bootstrap, Heroku

**Book Search Engine** | https://github.com/aj-pena/Book-search-engine.git | https://googlebooks-ajp.herokuapp.com/
- Summary: Served as the sole author for this app that allows users to find and save books in a personal collection.
- Tools: Express, NoSQL, Apollo-Server, GraphQL, Google Books API, ReactJS, Heroku, MERN Stack

**Dollars4Scholars** | https://github.com/giftilicious/scholarship-app.git | https://aqueous-ocean-45024.herokuapp.com/
- Summary: Served as the Front End Co-Designer of this application that allows the user to provide scholarships to students from underserved communities and allows the student to find funds to advance their education.
- Tools: Express, NoSQL, Apollo-Server, GraphQL, Google Books API, ORM, ReactJS, Heroku, MERN Stack

## EXPERIENCE

***Remote Transportation Consultant***                                                                      2020 - 2021
**Movilidad Sostenible Ltda;** Ottawa, ON
Determined the critical bicycle and infrastructure characteristics that enable safe and convenient travel for parents cycling with children, in Bogota, Colombia.
- Designed a set of actions based on results of ~500 surveys done to identify preferences of parents cyclists.
- Proposed bicycle improvements by producing the mobility chapter of the strategy report delivered to the city.
- Identified measures to eliminate traffic fatalities and harassment by creating community groups, training, and signage.

***Engineering Intern***                                                                      2018 - 2019
**Parsons Corporation;** Ottawa, ON
Wrote technical reports for eight (8) traffic impact studies in Ottawa, Ontario. Prepared presentation slides for three (3) technical advisory committees on the Ottawa Road Corridor Design Guidelines-Urban Collectors Update to discuss progress and narrow-down guidelines. Conducted case studies research to inform proposed guidelines.

***Transportation Specialist Consultant***                                                                      2017 - 2018
**Movilidad Sostenible Ltda & Hill Ltda;** Ottawa, ON
Formulated the technical component of the cycling policy for Chía, Colombia (~133K inhabitants). Facilitated focal groups with citizens and municipal officers to identify priorities. Evaluated the National Registry of GHG Emissions Reduction (RENARE by its Hispanic Acronym) to identify issues. Tested the features of the web application before release. Identified frontend bugs, as well as errors in the queries results. Used statistical analysis on surveys of cycling preferences (400 respondents) as well as mobility demand trends, land use, weather, local policy, and regulations to characterize the area of study.
- Wrote an analytical report with recommendations for expansion of cycling infrastructure and educational campaigns.

***Transportation Specialist***                                                                      2014 - 2017
**LCRD Program USAID / USFS;** Bogotá, Colombia
Provided technical assistance to the transportation team to help decouple economic growth from carbon emissions at the national and municipal levels. Executed the characterization of the transportation monitoring systems in four cities in Colombia.
- Decouple economic growth from greenhouse gas emissions by delivering a technical report for the City of Pasto (~480K inhabitants), Colombia, that identified opportunities and challenges within the transportation institutions.
- Co-wrote the mobility chapter of the 2030 Action Plan for the City of Valledupar, which identified ($300 MUSD) of investments to advance sustainable development.

## EDUCATION

**Full Stack Web Development Certificate** – University of Toronto, ON | **2021**

**STUDIO First Certificate** – Carleton University, ON

**Master of Science in Transportation Engineering** – Universidad de Los Andes, Colombia

**Bachelor of Science in Civil Engineering** – Universidad de Los Andes, Colombia