

CARLOS SALINAS

Mobile: (765) 337-9606
Email: cemiliosal@gmail.com

GitHub: [cdrlos](https://github.com/cdrlos)
Linkedin: [carlos-salinas-64588b160](https://www.linkedin.com/in/carlos-salinas-64588b160)

OBJECTIVE

I am making a career transition from mathematics into something I have a growing passion for: web development with a focus on data analysis. Full-stack Clojure.

SKILLS

Programming Languages: Python, Clojure, JavaScript, Java, C++, R, Matlab

Developer Tools: Vim, Emacs, Jupyter, Git, PostgreSQL, Leiningen, Gradle

Other Software: Linux, LaTeX, Markdown, Jekyll, Bash

Natural Languages: English—native, Spanish—native, Russian—fluent, French—proficient

EDUCATION

Purdue University, West Lafayette, IN

Aug. 2020

Master of Science in Mathematics

University of Texas–Pan American, Edinburg, TX

May 2014

Bachelor of Science in Mathematics

EXPERIENCE

Department of Mathematics, Purdue University

West Lafayette, IN

Research Assistant/Teaching Assistant

Aug. 2014 – May 2020

- Led recitation for undergraduate courses, such as Calculus 1, 2, 3, Differential Equations, and Linear Algebra.
- Created course-related content for students, such as notes, quiz and midterm solutions, and performance statistics.
- Wrote code to study the finite quotients of triangle and nilpotent groups.

School of Mathematical and Statistical Sciences, University of Texas–Pan American

Edinburg, TX

Undergraduate Research Assistant/System Administrator

Sep. 2013 – May 2014

- Managed the Experimental Algebra and Geometry Lab's Linux cluster, which included administering users, installing software, running services, and configuring the lab's GPU.
 - Wrote a program to compute 2-special word families up to word-length 30 which leveraged the existence of trace formulas, dependence on lower order polynomials together with memoization to reduce the time complexity.
- Published the sequence on the On-line Encyclopedia of Integer Sequences [A237623](#).

Department of Materials Science and Engineering, Massachusetts Institute of Technology

Cambridge, MA

Undergraduate Research Assistant

Jun. 2010 – Aug. 2010

- Tested heat-treated Ti-Ta alloys of varying compositions for shape-memory and superelastic properties by means of hot oil recovery test. Took metallographs of samples to study the microstructure. Performed mechanical tests, such as tensile test, and fatigue tests, and recorded the results.

OUTREACH EXPERIENCE

College of Agriculture, Purdue University

West Lafayette, IN

Academic Boot Camp for Purdue's Minority Engineering Program

Jun. 2018 – Aug. 2018

- Simulated a first semester Calculus experience for incoming undergraduate students in the MEP. Prepared and graded student homework and midterms. Assigned final letter grades and gave course recommendations.

School of Mathematical and Statistical Sciences, University of Texas–Pan American

Edinburg, TX

Outreach Assistant for the Experimental Algebra & Geometry Lab

Sep. 2012 – May 2014

- Introduced K12 students in the Texas RGV to abstract mathematics, such as modular arithmetic, complex numbers, and spherical geometry through kinesthetic activities.

PROJECTS

cdrlos.github.io A small portfolio hosted on GitHub Pages. Currently under construction.

math.purdue.edu/~salinac University webpage. Mostly contains teaching material.