

# Alfredo Fernandez

github.com/addier94 | linkedin.com/in/addier94  
|fernandezalfredo.com

## EDUCATION

### UTEPSA UNIVERSITY

#### MENG IN COMPUTER SCIENCE

Dec 2017 | Santa Cruz, Bo

### FULLSTACK BOOTCAMP

#### IMMERSIVE SOFTWARE DEV.

May 2023 | Santa Cruz, Bo

Curriculum: FullStack JavaScript and Computer Science Award: for most technically Challenging project Reached highest rank (1 kyu) on Codewars.com

### LANGUAGE

Spanish, Native | English, C2

## SKILLS

### TECHNICAL SKILLS

Proficient with: TypeScript • JavaScript • Shell • Linux

React • Redux • Node.js •

Mysql

HTML • CSS3 • CSS • Git • Nextjs

### SOFTSKILLS

Outstanding: Bilingual Communicator (Spanish, English)

Public Speaker • Leader • Motivator

## TECHNICAL PROJECTS

### **SORTING VISUALIZER** | WEBSITE, GITHUB

Sep 2023 | Santa Cruz, Bo

- Built React Redux application for visualizing sorting algorithms.
- Implemented Merge Sort, Quick Sort, Heap Sort, and Bubble Sort.

### **PROGRAMMING LANG. AND INTERPRETER** | GITHUB, TALK

Jun 2023 | Santa Cruz, Bo

- Built small programming language and interpreter in JavaScript
- Implemented variable declaration. functional calling. conditionals, loops. order of operations, recursion, and error handling

### **PATHFINDING VISUALIZER** | WEBSITE, GITHUB, TALK

May 2023 | Santa Cruz, Bo

- Built VanillaJS application for visualizing pathfinding and maze-generation algorithms
- Implemented 9 different algorithms and co-developed unique pathfinding algorithm based on A\* Search and Dijkstra's Algorithm

### **FLOW** | WEBSITE, GITHUB, TALK

Jan 2023 | Santa Cruz | Bo

- Built and deployed Chrome extension and website in react/Redux
- Conceptualized and designed frontend of extension
- Implemented backend routes connecting website to extension
- Led daily Scrum meetings and managed project goals on Waffle.io

## BUSINESS PROJECTS

### **ROBOT LEARNING LAB** | RESEARCHER

Dec 2023 | Santa Cruz, Bo

Worked with **Ashesh Jain** and **Prof Ashutosh Saxena** to create **PlanIt**, a tool which learns from large scale user preference feedback to plan robot trajectories in human environments.

### **CORNELL PHONETICS LAB** | HEAD UNDERGRADUATE RESEARCHER

Mar 2023 | Santa Cruz, Bo

Led the development of **QuickTongue**, the first ever breakthrough tongue-controlled game with **Prof Sam Tilsen** to aid in Linguistics research.

## PUBLICATIONS

- [1] A. Jain, D. Das, and A. Saxena. Planit: A crowdsourcing approach for learning to plan paths from large scale preference feedback. *Tech Report, ICRA*, in press.
- [2] S. Tilsen, D. Das, and B. McKee. Real-time articulatory biofeedback with electromagnetic articulography. *Linguistics Vanguard*, in press.