



ALFRED

Elzeiny

Software Engineer



EDUCATION

San Jose State University

Aug 2011 - May 2016

Minor Computer Sci

Minor Mathematics

B.S Civil Engineering

Dean's List Honorary

App Academy

Mar 2017 - Jul 2017

Web-Development

SKILLS

FRONT-END

React

Redux

VueJS

D3

BACK-END

Ruby on Rails

PostgreSQL

NodeJS

ASP.NET

Azure

AWS

Languages

C#

Ruby

JavaScript

Java

Friendship

CERTIFICATES

AWS Associate Developer

Engineer-In-Training (EIT)

Google Analytics

PROFESSIONAL EXPERIENCE

FULLSTACK SOFTWARE ENGINEER

DEPARTMENT OF PUBLIC WORKS - SAN FRANCISCO, CA, JUNE 2016 - MARCH 2017

- Conceptualized, designed, and built user and staff friendly automation websites
- Saved 160 weekly staff-hours by overhauling all procedures and systems to tailored digital alternatives

STRUCTURAL ENGINEER-IN-TRAINING

UMERANI ASSOCIATES DRAFTING DEPT. - PALO ALTO, CA, JUNE 2014 - SEPTEMBER 2014

- Modernized a library of macros for efficiency using AUTOLISP, shaving an average of 20 minutes each time a new .dwg file is created
- Demonstrated efficiency by writing scripts that computed complex calculations

SOFTWARE ENGINEERING PROJECTS

Cloud Casts



React, Redux, Ruby on Rails, PostgreSQL, ES6

- Developed a fully-featured podcast site that fetches live data for searching, browsing, and playing podcast episodes in real-time
- Designed an original, mobile-responsive UI/UX with modular screen layouts
- Implemented an image sampling algorithm that derives contrasting colors to dynamically generate aesthetically pleasing color palettes

SF Subdivision Application System



ASP.NET Core, Entity Framework, Identity Framework, Code-First Workflow

- Self-taught in ASP.NET with Identity and Entity Code-First Frameworks in 5 days
- Standardized an online application system resulting in the completion of 3 months of backlogged projects within a timespan of week and a half.
- Converted a total of eight applications and 64 highly modular forms, all redesigned for a mobile-responsive and streamlined experience deployed on Azure Cloud.

Synopsis, Machine Learning Visualization



JavaScript ES6, Vue, D3, Webworker

- Implemented and visualized a convolutional neural network that learns how to recognize handwriting from the MNIST dataset

Procedural Level Pathfinder



- Implemented and depicted the Cellular Automata level generation algorithm, Polygon Addition and Subtraction algorithms, Concave Mesh generation, and A* Pathfinding

Data-Structures in 1000 words



- Implemented interactive animations for 12 essential data-structures often taught in upper-division CS classes (in-progress)