



# AHMED

## Elzeiny

Software Engineer



## EDUCATION

### San Jose State University

B.S Civil Engineering  
Minor Computer Science

### App Academy

12-Week Full-Time  
Web-Development Course

## SKILLS

### FRONT-END

React	★★★★★
Redux	★★★★★
Vue	★★★★★
CSS/SASS	★★★★★
HTML 5	★★★★★
jQuery	★★★★★
Bootstrap	★★★★★
D3	★★★★

### BACK-END

Ruby on Rails	★★★★★
PostgreSQL	★★★★
NodeJS	★★★★
ASP.NET	★★★★★

### Tooling

Heroku	★★★★★
AWS	★★★★
Webpack	★★★★
Git	★★★★★

### Languages

C#	★★★★★
Ruby	★★★★★
JavaScript	★★★★★
Java	★★★★★
English	★★★★★

## PROFESSIONAL EXPERIENCE

### FULLSTACK ENGINEER

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

- Conceptualize, 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.

### Synapsis, 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