

Overview

Avid rock climber with a passion for programming in web and machine learning applications: Image recognition, NLU, computer vision, autonomous navigation systems and other deep learning topics. With 2+ years of industry experience in practical application of facial recognition in EMPI matching algorithms, and current experience with modern web frameworks, I want to continue pursuing similar challenges.

Education

Masters of Science – UCLA – Aerospace Engineering **Graduated June 2015**

GPA: 3.68, Focus: Systems and Control

Bachelors of Science - UCLA – Mechanical Engineering **Graduated June 2014**

GPA: 3.89 – Summa Cum Laude, Focus: Computer Science

Work Experience

Web Developer: Huntington Ingalls Industries (HII-TSD) **December 2019 – present**

Worked with .NET and Angular 7 to build/maintain applications used by Unmanned Underwater Vehicle Systems for data collection and analysis. Used Cesium.js for displaying historic and real time geographic data in the browser.

Interim (World Travel and Personal Projects) **March 2018 – December 2019**

Between Jobs I traveled the world (Switzerland, Italy, Germany, Austria, France, England, Scotland and South Africa), built my website using VueJS + Netlify, and honed my Computer Science skills

Solutions Architect: NextGate Soltions **March 2016 – March 2018**

Worked with Java, Java EE, and Angular 1 to create and maintain Java and web applications for customers and for NextGate: EMPI implementation, data integration and workflow tools for Ascension Health and Northern Territories Australia, and facial recognition for identification and matching algorithms.

Teaching Assistant: UCLA **Fall 2014 – Winter 2016**

Administrated labs and discussions for both the Mechanical Engineering and Life Science departments. Awarded "Certificate of Distinction in Teaching" by the UCLA Life Sciences Division.

SolidWorks 2014 Beta Support: Dassault Systemès **Summer 2013**

Direct line of support with customers for the SolidWorks 2014 Beta at the Woodland Hills office in L.A.

Rockwall Supervisor: UCLA Recreation **Spring 2013 – Spring 2014**

Notable Projects

- Facial recognition for EMPI matching algorithms – *Python, Docker, Java, ZeroMQ, OpenFace, Torch and Lua*
- Web Applications used by Unmanned Underwater Vehicle Systems - *.NET, C#, Angular 7, NgRx, Cesium, DDS*
- EMPI implementation with data integration for millions of records. 100k+ daily message volume and real time address validation – *Java, Angular 1, Apache Karaf, Apache Camel, SOAP, HL7v2, HL7v3, Unix*
- Autonomous collection and deployment robot – *LabView, SolidWorks*
- 3D sandbox game – *JavaScript, WebGL*
- Finite element solver for membranes under plane stress condition & Finite volume solver for 2D flow – *MATLAB*
- Short Tandem Repeat Analysis of DNA Sequences – *R*

Programming Languages and Technologies

- Python, Java, C++, C#, MATLAB, R, JavaScript, TypeScript, LabView, Lisp, SQL, Ruby, Unix, bash, sed
- Docker, WebGL, AngularJS (1 and 2+), Vue, Redux (NgRx + Vuex), Node, Cesium.js, .NET, OSGi, DDS, Ruby on Rails, Apache Camel, Apache Karaf

References

- Ryan Davis, *Software Lead at HII-TSD* – ryan.davis@hii-tds.com
- Dan Cidon, *CTO at NextGate* – dan.cidon@nextgate.com
- Will Conley, Math Professor at UCLA – wconley@ucla.edu