

Overview

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

Education

Masters of Science: UCLA

Graduated June 2015

Major: **Aerospace Engineering (3.68 GPA)**

Focus: **Systems and Control**

Bachelors of Science: UCLA

Graduated June 2014

Major: **Mechanical Engineering (3.89 GPA, Summa Cum Laude)**

Technical Breadth: **Computer Science**

Work Experience

Solutions Architect: NextGate Solutions

March 2016 – March 2018

Worked with Java, Java EE, and internet technologies (AngularJS) 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, as well as facial recognition for identification and matching algorithms.

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 Los Angeles.

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.

Rockwall Supervisor: UCLA Recreation

Spring 2013 – Spring 2014

Notable Projects

- Facial recognition for EMPI matching algorithms – *Python, Docker, Java, ZeroMQ, OpenFace, Torch and Lua*
- EMPI implementation with data integration for millions of records. 100k+ daily message volume and real time address validation – *Java, Apache Karaf, Apache Camel, SOAP, HL7v2, HL7v3, Unix*
- EMPI Workflow Tools – *Java, AngularJS*
- Autonomous collection and deployment robot – *LabView, SolidWorks*
- 3D sandbox game – *JavaScript, WebGL*
- Finite element solver for membranes under plane stress condition – *MATLAB*
- Finite volume solver for 2D flow – *MATLAB*
- Short Tandem Repeat Analysis of DNA Sequences – *R*

Programming Languages and Technologies

- Python, Java, C++, MATLAB, R, JavaScript, LabView, Lisp, SQL, Ruby, Unix, bash, sed
- Docker, WebGL, AngularJS, Vue, Node, OSGi, Ruby on Rails, Apache Camel, Apache Karaf

References

- Gevik Nalbandian, VP of Software Engineering at NextGate – zgev@yahoo.com
- Dan Cidon, CTO at NextGate – dan.cidon@nextgate.com
- Tony Tsao, Senior Manager at Dassault Systèmes Solidworks – tonytsao@gmail.com
- Will Conley, Math Professor at UCLA – wconley@ucla.edu