## David Edwards Software Engineer Hawthorne, CA

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512-998-1729

#### JOB RELATED SUMMARY:

- Accomplished Software Engineer who holds Bachelor's Degree in Computer Science from California State University.
- Core languages experience: C/C++ 6 years, Python 10 years. Java 6 years.
- Experienced in Amazon Web Services(AWS), and Matlab in academics to develop Simulink models and observe the output, M-Files, simple GUIs.
- 10+ years experience with Git and Subversion repository code version control system and working in Agile / Scrum team project development.
- Project experiences include creating dynamic web/mobile applications using: HTML5, CSS3, SQL/NoSQL, Java, Python on UNIX/Linux and Windows platforms. Python backend, API and GUI tool developer.
- 18+ years Linux OS experience.
- US Navy Veteran 6 years Aviation Electronics Technician Supervisor.

#### **EDUCATION**

Bachelor of Science in Computer Science, California State University, Los Angeles, CA 2014 Associates of Computer Science- San Diego City College, CA 2009

#### PROFESSIONAL EXPERIENCE:

## Qualcomm, San Diego, CA

July 2020-June 2023

#### **Engineer**

Embedded Software Content Compliance and Linux Open Source team:

- Develop, maintain, and operate software scanning automated tools using C/C++, Python, Docker, Bash scripts.
- Overview embedded software product development lifecycle of Open Source Systems for Android, Linux, Arm, Kernel, GNU.
- Reviewed in-house developer code for open source compliance.
- Developed and maintained open source compliance review automation systems.
- Developed a web API for Open Source team to curate and manage SBOM (Software Bill of Materials) reports.
- Support engineering teams in managing open source compliance.
- Built tools in automation to streamline development processes utilizing C/C++, Python, Docker, Django, Linux/Scripts (Python, Bash, JS), JavaScript, Node.js, React.js, other JS variants.
- Systems used: Jira, Gerrit, Git/GitHub, Docker, Django, Microsoft suite of tools.

## ABCO Technology Institute, Inglewood, CA Mobile Application Developer

August 2019 - Sept 2020

- Created dynamic, database-driven mobile applications and websites for business-to-business / business-toconsumer userbases using latest technologies including Android + Kotlin with Android Studio to deploy
  applications on Xamarin, React Native or Flutter frameworks.
- Worked closely with Web marking and business specialist departments to gather business and technical requirements, and architect working solutions working within financial and resource constraints.
- Projects applied variety of specialties including e-commerce design and search engine optimization.

# Saatchi & Saatchi, Torrance, CA

October 2015 - July 2019

#### **Python Developer**

• Developed in-house tools and scripts using Python, PyQt, PySide and JavaScript in Maya, Nuke, Shotgun and Photoshop.

- Maintained Python codebase connecting to Deadline hooks and exits for Autodesk Maya, The Foundry Nuke, Shotgun Software, and Thinkbox Deadline.
- Evaluate and test new applications, software, and workflows to improve production.
- Worked with a team to develop an ingestion system to automate build data sheets for annual garage CAD data from Japan utilizing Unreal Engine.

#### DIRECTV, Marina Del Ray, CA

**April 2015 – June 2015** 

#### **Software Engineer**

- Modifying and creating scripts responsible for talking to pieces of communications and satellite equipment using Java and Groovy programming languages.
- Build front-end UI to monitor and maintain cable TV network traffic using a combination of third-party products and Groovy.

# theAudience.com, Los Angeles, CA

October 2014 – January 2015

## Data Analyst/Developer

- Created data collection scripts in Python to collect and store data from various social media sources utilizing social media's API.
- Queried data analytics API on AWS tiered services using MongoDB NoSQL to provide insights into ROI for our Fortune 500 clients investments calculated from all social media data sources.
- Maintained and extended internal APIs to served stored data to other applications and generate reports.
- Worked with other development, analytics and sales teams to create client facing reports.

#### **INTERNSHIPS AND PROJECTS**

# General Motors Sponsored EcoCar2 Competition, Los Angeles, CA QT/QML/C++ GUI Developer

**January 2014 – June 2014** 

- Developed a GUI interface for an embedded system which runs C++ on a Freescale i.MX 6 Sabre ARM board.
- Used a custom Linux kernel to program the Freescale board.
- Used C++ to transmit and receive CAN signals over the vehicle's CAN bus.
- Developed a user interface using Qt QML library to create software-based controls to replace radio and climate control mechanical buttons while continually displaying live diagnostic data signals.
- Read and write CAN signals from the car, translating them using a Linux driver, and implemented in QML, C++ to display interactive touch screen controls on the vehicle display console.
- Tested onboard program inside vehicle with live controller area network signals.
- Debugged onboard program through serial cable.
- Worked with a team of 6 developers on computer science portion of project.
- Project Website: <a href="http://csns.calstatela.edu/department/cs/project/view?id=4556961">http://csns.calstatela.edu/department/cs/project/view?id=4556961</a>

#### Boeing Company, El Segundo CA

August 2013 – January 2014

#### **Test Framework Developer**

- Built a test framework to automate testing for Boeing 702SP operations satellites by developing a system in Java and Python that automates the conversion of TCL/Tk-encoded test cases into Sikuli-readable JSON using the Java ANTLR parser.
- Identified and extracted test cases from TCL/Tk and Perl scripts using ANTLR into an interactive user interface in Java's JGraphx API for test engineers to select test cases, then using Sikuli, a GUI automation tool that was used to replace the test engineer, automate the process on the satellite simulator and produce a log report for later review.
- The final result was successful in optimizing testing, while saving Boeing Company time and money.
- Project Website: http://csns.calstatela.edu/department/cs/project/view?id=4556960

# PCWerk.com, Playa Vista, CA

January 2013 - June 2013

## Project Developer

- Wrote a program that performed data scraping from Yelp's website using Python and Selenium Web driver, and Yelp API.
- Deployed this program on a Hadoop single-node cluster setup on Ubuntu Linux.
- Performed Data Mining and Data Warehousing with MapReduce operations on single-node HDFS on Ubuntu Linux.

- Used Yelp API access for data collection.
- Performed data classification and data massaging from JSON to CSV text.
- Calculated Data analysis on yelp datasets from Yelp API using python while utilizing python extension library pylab.
- Created and presented data visualization using python matplotlib and google maps API Hosted at: <a href="https://github.com/pcwerk">https://github.com/pcwerk</a>

#### LICENSES / CERTIFICATIONS

Mobile Application Development certification - (Android/iOS hybrid) Logical Operations Master Mobile Application Developer (MMAD), ABCO Technology Institute. Nov. 2020.

Accredited Project Manager (APRM<sup>TM</sup>) certified. 2019.

OSHA 30 licensed Oct. 2019.

FCC (Federal Communications License) with GROL endorsement. 2003.

Advanced Fiber Optic Installation Technician License. 2003.