**David Edwards**

**Software Engineer**

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Location: Los Angeles (Hawthorne), CA 90250

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**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.
* Familiar with 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, Django DB integrated codebases running 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:**

**UpWork.com / Freelancer.com July 2023 – Current**

**Software Engineer (Freelance)**

* Designing application systems, recommend and apply software upgrades for clients.
* Establish relations with new and repeat clients to write new code and integrate updates to legacy websites.
* Communicate with clients to understand their needs and implement upgrades to legacy embedded software.
* Upgrade and maintain personal portfolios and websites.

**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 August 2019 - Sept 2020**

**Inglewood, CA**

**Mobile Application Developer**

* Created dynamic, database-driven mobile applications and websites for business-to-business / business-to-consumer 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.
* Provided insights to what information can be determined from each social media data source.
* Maintained and extended internal APIs to served stored data to other applications.
* Maintained and extended internal report generation tools.
* Worked with other development, analytics and sales teams to create client facing reports.

**INTERNSHIPS AND PROJECTS**

**General Motors Sponsored EcoCar2 Competition, Los Angeles, CA January 2014 – June 2014**

**QT/QML/C++ GUI Developer**

* 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:** [**http://csns.calstatela.edu/department/cs/project/view?id=4556961**](http://csns.calstatela.edu/department/cs/project/view?id=4556961)

**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: [**https://github.com/pcwerk**](https://github.com/pcwerk)

**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™) certified. 2019.

OSHA 30 licensed Oct. 2019.

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

Advanced Fiber Optic Installation Technician License. 2003.