David A. Edwards

***Software Developer***

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**LinkedIn**: <http://www.linkedin.com/in/davedwards>

**Git Profile**: <http://github.com/davedwards>

**StackOverflow:** <https://stackoverflow.com/users/1248974>

**Webpage**: <http://red.ht/2KFaIf8> (2kfaif8)

SUMMARY

* Object-oriented programming (OOP): **Python, Java, C++**
* **Scripting: Python, Bash**
* Familiar with: **Unreal Engine 4** (**C++**)**, JavaScript, PHP, JSON / XML, C#, Tcl/Tk, Maven**
* Experience developing cloud software services
* Experienced with **Git** and Subversion repository code version control system and working in **Agile** / **Scrum** team project development
* **Big Data** Analysis and Visualization (<http://bd.pcwerk.com>), good understanding of data visualization
* 6 months mobile applications development (Windows 8 **Visual Studio, C++,** **Android, Java, Eclipse**), Cisco network routing and switch configuration and management, Cryptography and Info Security
* 4 years Software Developer (*lab/academic*) project experience creating web/mobile applications **dynamic** web applications using: **HTML5, CSS, MySQL, Java, Python** on UNIX/Linux and Windows platforms
* 10 + years **GNU/Linux** OS. Microsoft Office Development Tools
* Industries: **Avionics, Aerospace**, Automotive, and Social Media platforms, Television Broadcast Systems

WORK HISTORY

**3D Developer**, Saatchi & Saatchi, Torrance, CA 90505

September 2015 – July 2019

* Designed, wrote, maintain and debug scripts and applications in Python as needed to meet requirements for the Monitoring & Control Department.
* Maintained Python codebase connecting to Deadline Hooks and Exits for Autodesk Maya, The Foundry Nuke, Shotgun Software, and Thinkbox Deadline.
* Develop tools and integrations across all studio software, including Maya, Nuke, Photoshop, Deadline, and Shotgun.
* Worked in a small team of 3 developing VR content in C++ using HTC Vive and Oculus using Unreal Engine 4
* special focus on improving user interaction for things like navigation, manipulation of VR content, performance tuning
* took over VR project from another team, addressed client notes, and redelivered assets
* Demo: [Dr. Kaku’s Microcosmic Journey Through Mirai | 360 Video | Toyota](http://youtu.be/aC2Dc8EjP6U) - [http://youtu.be/aC2Dc8EjP6U](https://youtu.be/aC2Dc8EjP6U)
* Work with artists to troubleshoot production and rendering issues.
* Evaluate and test new applications, software, and workflows to improve production.
* Worked in a team of 4 to develop a QT GUI to ingest build data sheets for annual garage CAD data from Japan.
* Monitored and maintained 3D animation and render farm jobs and tasks via Deadline.

***Software Developer,*** *DirecTV, El Segundo, CA 90245*

*April 2015 – June 2015* (3 month contract)

* Designed, wrote, modified and debugged scripts and applications in Groovy and/or Java as needed to meet requirements for the Monitoring & Control Department.
* Built front-end UI using a combination of third-party products and Groovy.
* Ensured that software development efforts comply with coding standards and software version control.
* Participated in all cycles of the testing phase to validate code, including unit testing, subsystem testing and end-to-end testing.
* Provided engineering support for test execution and initial production deployment including interfacing with other engineering teams.
* Identified technical issues in production. Provided recommendations for appropriate approaches and solutions.
* Communicated with system users in production to understand system vulnerability and weaknesses.
* Provided information efficiently to all management levels on ongoing issues, project activities and progress.
* Worked with offshore teams to support any project development work on an as-needed basis.
* Participated during non-business hours for system maintenance
* Occasionally traveled locally to support various projects and performed on-site maintenance.

***Data Analyst Developer***, theAudience.com, 8275 Beverly Blvd, Los Angeles, CA 90048

November 2014 – February 2015 (3 month contract)

* 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 teams to create client facing reports in Flask, PHP, and JavaScript

INTERNSHIPS

***Senior Project Internship, QT/QML/C++ Graphic User Interface Developer***, California State University, Los Angeles, General Motors Sponsored EcoCar2 Competition

January 2014 – June 2014

Project Website: <http://csns.calstatela.edu/department/cs/project/view?id=4556960>

* Worked with a team of 6 developers on computer science portion of project
* Developed a **GUI** interface for an embedded system which runs 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 the **Qt's 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** and **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

***Senior Project Internship, Test Framework Developer*,** California State University, Los Angeles,Boeing Company

September 2013 – January 2014

Project Website: <http://csns.calstatela.edu/department/cs/project/view?id=4556961>

* Built a test framework to automate testing for Boeing 702SP operations **satellites** by developing a program in **Java** and **Python** that automates the conversion of **Tcl**-encoded instructions into a Sikuli-readable format (**JSON**) using an **ANTLR parser**
* Included parsing formal languages using **ANTLR** and automating test using **Python** and **Sikuli,** wrote an automation tool in Sikuli to accept the **JSON** data, run the tests on the simulator, and produce a test report

***Microsoft Windows 8 Store Apps (Independent Developer)***, California State University, Los Angeles, CA

January 2012 – July 2013

* Developed nine apps written in C++ with XAML for Windows 8 Store release. Available on standard platform and mobile devices

Apps available at: <http://windows.microsoft.com/en-us/windows/search#q=davedwards&s=Store>

***Big Data Project Developer***, PCWerk.com

January 2014 – March 2014

Beautiful-Data: Big Data Analysis and Visualization Project for PCWerk.com under California State University, Los Angeles, CA

Hosted at: <http://bd.pcwerk.com/>

* 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

***Dynamic Website Project Development (Independent Developer)****,*California State University, Los Angeles, CA

September 2012 – June 2013

* Dynamic Web Services running on Cloud – a Linux EC2 instance of Amazon Web Services (AWS), Java Servlets and Java Server Pages (JSP). Storage maintained via Amazon S3 instance using standards-based REST and SOAP interfaces
* Developed web application similar to Kickstarter which allows projects/startup companies to post their projects online and receive funding. Users can register to add a new project or sponsor existing ones. The application is developed using MVC architecture and server-side programming in Java. For database MySQL is used

***Database Designer Internship***, City College Math Center, San Diego, CA

September 2007 – July 2009

* Created and converted several existing databases from FileMaker Pro to **MySQL** with a graphic front end, working closely with math department professor for requirements of software

EDUCATION/CERTIFICATES/LICENSES

**Bachelor's of Science** in **Computer Science** - California State University, Los Angeles. June 2014

**Associates of Arts and Sciences** in **Computer Science** - San Diego City College

FCC with General Radio Operator’s License Endorsement. Active since August 2003

Advanced Fiber Optic Installation Technician. Active since August 2003

HONORS/AWARDS/SCHOLARSHIPS

**2013 - American Public Works Association (APWA) Southern California Chapter Scholarship for Software Developing Program**

MILITARY EXPERIENCE

September 2000 – September 2006

***Aviation Electronics Technician Supervisor***, US Navy, San Diego, CA

* Supervised and trained over 50 electronic technicians on use of new equipment enabling the repair of 30 new assemblies. Repaired approximately 5000 repairable electronic assemblies without rework for F/A-18 Hornet jets and Navy Helicopter communications for naval aircraft ID and weaponry electrical systems and equipment
* Troubleshot and identified discrepancies to the component level in accordance with NAVSEA 04RM3 Military Specs and Standards.
* Installed components in electro-mechanical assemblies reducing the amount of outsourcing and time needed to repair assets. Increased personal performance by doubling as a Quality Assurance Inspector saving the shop time consuming steps in the repair process
* Graduated Navy’s Advanced Electronics Program. Completed 3-year Naval Nuclear Propulsions Training and Prototype. IFF specialty. Rank: Petty Officer Second Class, E-5

ORGANIZATIONS

Association of Computing Machinery (ACM) member since 2008