

Alan Lo

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EXPERIENCE

WEEDMAPS | BACKEND SOFTWARE ENGINEER II

Aug 2023 - Present | Irvine, CA

- Collaborated with SREs to upgrade database migration to HasuraDB, improving both efficiency and reliability
- Created a Docker-based local environment with the Platform team, allowing full end-to-end testing for Weedmaps services
- Initiated and led the effort to greatly enhance unit test coverage for the Ad-Serving Platform, increasing code reliability and speeding up development

DISH NETWORK | SOFTWARE ENGINEER II

June 2019 - July 2023 | Englewood, CO

- Implement and Deploy Dish's Proprietary microservices as Docker-images into Amazon EKS(Kubernetes)
- Maintain Client-to-Server communication with Gstreamer API for On-Demand video streaming using Java/Kotlin
- Arbitrate with Software Architect and Product Owner for planning and delivering of customer-facing features while executing Agile/Scrum framework for quarterly iteration
- Applying root cause analysis on real-time logs to diagnose and resolve defects in real-time Backend Applications

FUJITSU FRONTECH | SOFTWARE SUPPORT INTERN - BIOMETRICS SECURITY

Apr 2018 - Aug 2018 | Foothill Ranch, CA

- Utilized VMWare to assure Palmsecure sensor capabilities in different OS
- Revised Palmsecure user-space sensor driver code from v3.x to function in v4.x Linux Kernel
- Proposed SOC processors to ensure secure-boot for PalmSecure Biometrics Authentication
- Interfaced C++ application functions into NodeJS modules with Javascript
- Provided technical-support to customers in preparing software development kit for PalmSecure biometrics authentication

DELPHI DISPLAY SYSTEMS | ENGINEERING INTERN

Oct 2017 - Mar 2018 | Costa Mesa, CA

- Composed Quality Assurance test assets for Software Test Verification and Validation
- Executed and documented 10+ quality assurance test procedures and its results
- Validated procedure for image software creation for display systems
- Reduced time in quality test cases by 75% with automation in Selenium
- Utilized SharePoint by modifying design documents and BOM

UCI-OFFICE OF INFORMATION TECHNOLOGY(OIT) | HELP DESK

Oct 2015 – Jun 2016 | Irvine, CA

- Engaged 100+ UCI students and staff through solving technical-related issues
- Efficiently managed 100+ ServiceNow tickets, enhancing process efficiency by 10% through workflow optimization.
- Participated in a 24/7 on-call rotation, responding to and reporting system outages and security breaches

ELAC-LEARNING CENTER | TUTOR/CAI-LAB ASSISTANT

Oct 2014 – Jul 2015 | Monterey Park, CA

- Instructed 50+ college students with diverse backgrounds in STEM-related subjects
- Assisted first-year and continuing students with accessing campus provided softwares and applications
- Utilized Microsoft Access in keeping records of returning tutee

PROJECT

BIOMETRICS HAND SCANNER ON CURVED SURFACES | SENIOR DESIGN PROJECT

Sept 2017 - Apr 2018

- Integrated control software on Raspberry Pi with CMOS Camera sensor into a curved push bar door-handle for capturing Biometrics data and uploading to Dropbox
- Investigated various Optic Filters on Curved Surfaces to enhance quality of Biometrics data captured with CMOS Camera sensor
- Enhanced Quality of Biometrics data by executing SobelX and Median Blur Image filtering algorithm in OpenCV

EDUCATION

UNIVERSITY OF CALIFORNIA, IRVINE | B.S ELECTRICAL ENGINEERING

SPECIALIZATION IN DIGITAL SIGNAL PROCESSING

Relevant Coursework: Data Structures & Algorithms, Objected-Oriented System & Programming

Software Engineering with C, Systems Software, DSP Processor Lab & Design, Machine Vision, Financial Accounting

Jun 2018

SKILLS

PROGRAMMING

C/C++ • Java • Python • Kotlin

SOFTWARES

JIRA • AWS • Redis • Git • OpenCV

• Ubuntu • Git • Docker • Datadog • MySQL

• Vert.x • GStreamer API • GNU Make • Kubernetes

HARDWARES

Broadcom Embedded Processors • Arduino

• Raspberry Pi • Telnet/Serial UART • I2C

SPOKEN & WRITTEN

Native Proficiency:

Spanish

Limited Proficiency:

Mandarin/Cantonese