

SHIMONA CARVALHO

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PROFESSIONAL SUMMARY

Enthusiastic, experienced engineer looking for a new challenge in remote **full stack web development**, as an individual contributor.

I've previously worked as an individual contributor, technical lead, engineering manager and director in the Embedded Software industry. I love engineering and working on software with capable, smart and kind teams that solve compelling problems.

EXPERIENCE

Self Employed

May 2018 – Current

I spent the past year+ traveling. I visited and lived in 6 continents and 30 countries.

- Freelance remote work for a small scale Software-as-a-Service startup in the insurance industry. I delivered Django Python features on their backend and some Vue.js frontend.
- Published a travel photography website at <https://www.sidecarphoto.co> with my own articles and photography. Sold photography art prints.

Fitbit, Inc | San Francisco, CA

Jan 2013 – April 2018

Engineering Director

I led a team that delivered beautiful, intuitive, interfaces on Fitbit's smartwatches and trackers. We worked closely with hardware, Product and UX teams to deliver the best user experience, as efficiently as possible, in C on ultra low-power, resource-constrained devices.

- Participated in technical evaluations of acquisitions and new technologies, hiring and integration of new teams and code. One critical integration was the Pebble team, which enabled us to deliver an app development SDK using Javascript on device.
- Heavy involvement in team growth, scaling and reorganization as Fitbit grew rapidly. In 5 years, we scaled from 1 firmware UI engineer (myself) to an international development team of 50+ spanning 6 sites and 5+ countries.

Engineering Manager

- Delivered internationalization of Fitbit's hardware product line which enabled Fitbit to compete globally in APAC and EMEA markets.
- Key contributor to launch of San Diego office. Completed a 4 month assignment in Romania to help integrate Bucharest office and build bridges with the teams in California.
- Implemented, documented and improved team processes as the company scaled - including interviewing procedures, inter-team communications, and intra-team deliverables with design team.

Senior Engineer

As the lead UI engineer on the firmware team, I developed the UI on our first smartwatch based products, the Fitbit Surge and Blaze. Prior to these, Fitbit had only produced wristband devices so all the app infrastructure, menu interface, lifecycle and apps were written from the ground up.

- Collaborated closely with Product Management and Design teams to specify and define features that would delight and motivate users.

Texas Instruments, Inc | San Diego, CA
Software Engineer

Jun 2012 – Sep 2012

Development of EXI compression solution for XML messages over Zigbee networks. Solution proven at an interoperability event, putting TI head to head with competition.

Qualcomm, Inc | San Diego, CA
Senior Firmware Engineer

Oct 2008 – Nov 2011

Validation of multimedia-related cores on next generation cellphones with ARM microprocessors. Bridged the gap between silicon design team and software teams working on multimedia production software.

- Created and executed test plans for multimedia cores resulting in improvements to power and performance metrics and lowered energy usage.
- Piloted automation tool to speed testing of platforms. Implemented and presented case study to team, resulting in department-wide deployment of test automation.

Texas Instruments, Inc | San Diego, CA
Firmware Engineer

Jun 2001 – Oct 2008

Pre and post-silicon Validation of ARM+DSP based cellphone chips and customer UMTS platforms as well as system-level tests of chipset functionality. Participated in rapid wakeup and testing of brand new platform hardware and chips.

Software Design Engineer

Design and development of 3G and WCDMA cellphone software in embedded UMTS modems and systems.

EDUCATION AND QUALIFICATIONS

M.S. in Computer Science – Interdisciplinary User Experience Specialty
University of California, San Diego

Dec 2012

B.A. in Computer Science *cum laude*, minor in Mathematics
Pomona College, Claremont CA in conjunction with Harvey Mudd College

May 2001

SKILLS

- Extensive 15+ years experience in C, familiar with Python, Javascript and the Django and Vue.js frameworks.
- Proficient in engineering tools such as IAR, TI's Code Composer, Lauterbach, Git and JIRA, as well as Agile methodologies and practice.
- Familiar with UX methodology, Rapid Contextual Design, persona development.
- Development, debug and test of software and hardware on multiprocessor embedded systems comprising of ARM7 thru 11, Cortex-A, Cortex-M processors, etc.
- Writing, photography, publishing, marketing and SEO for my travel photography site.