

# Michael Contour

Project Engineer | Product Manager | Engineering Manager

*Bringing Innovative Products to Market by Solving Challenging Technical Problems*

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## SUMMARY

### **Project Engineering:**

Hands-on technical engineering leadership experience for large project teams. Evaluates new technologies and methods for their introduction into new products. Decomposes project requirements into actionable engineering tasks for cross-functional team members. Drives proactive risk mitigation by rapid prototyping of technical solutions. Leads design of experiments to expedite the learning process and to narrow down solutions. Continuously monitors level of confidence throughout development, and drives creative resolution to issues as they arise. Focuses on continuous improvement to engineering processes, policies, and procedures.

### **Product Management:**

Drives product requirements and the development roadmap. Ensures a cohesive vision of the project plan between management, business unit, engineering, operations, customers, subcontractors, and outside suppliers. Performs competitive analyses to identify strategic opportunities for innovative new products.

### **Engineering Management:**

Sets performance expectations for members of the engineering department. Aligns career goals of individual staff with strategic needs of the organization. Makes staffing assignments, organizes technical training, and leads project-specific recruiting efforts. Establishes an environment of continuous process improvement.

## PROFESSIONAL EXPERIENCE

### **VALCOM, Roanoke, VA**

#### **Director of Engineering**

**2016 – Present**

Leading development activities for mass notification products

- Generated innovative architectures to be leveraged into solutions for multiple new product lines. Drove product plans through stakeholders, and led Engineering teams during product development
- Improved methods to track and prioritize engineering efforts across multiple simultaneous projects, providing ability to complete projects in shorter timeframe.
- Accelerated the hardware development process by establishing the company's development procedures and engineering design guidelines.

## SKILLS

Electrical engineering of high speed CCA design for embedded systems designs, with ARM processors, wireless connectivity, sensors, battery charging and power management

Technical leadership for cross-functional teams

Rapid prototyping for proof of concept and to prove out use cases

Risk mitigation thru designs of experiment and advanced prototyping of new technical solutions

Tight communication and coordination with executive leadership, marketing, engineering, program management, partners, and customers

Analytical, flexible, motivated, passionate, creative, and persistent in a fast-paced, competitive environment.

## HIGHLIGHTS

Sixteen product and technology launches in the consumer product, wireless audio, biometric sensor, automotive, aviation, and satellite telecommunications markets

Effective management of Engineering organization in Fortune 100 company

Awarded five patents in product design and algorithms

**QUALCOMM INCORPORATED, San Diego, CA**

**Senior Director of Technology, Advanced Technology R&D**

**2011 – 2016**

**Project Engineer for new product developments, R&D leadership, and department management.**

- Architected and designed mobile ultrasonic fingerprint system for government applications, the 1st non-optical fingerprint scanner that received government Appendix F certification.
- Designed, developed, and launched ultrasonic pen family for smart phones and tablets. Drove transition to manufacturing in China.
- Developed a novel audio over Wi-Fi system that provides very low latency and tight channel to channel delay. Directed designs for wireless headsets and speaker arrays and corresponding applications on smart device.
- Led R&D initiatives to incorporate new innovative technologies into reference designs for company's high-performance cellular chip sets, providing product differentiation and shortening time to market for OEM customers.
- Managed product roadmap for audio accessories. Drove requirements for smart audio codecs.
- Granted patent for: Optimizing Audio Processing Functions by Dynamically Compensating for Variable Distances Between Speaker(s) and Microphone(s) in Mobile Device.

**Senior Director, Engineering, MediaFLO**

**2007 – 2010**

**Project Engineer for FLO-TV consumer devices and lead of FLO certification group**

- Increased business opportunity by developing two FLO-TV accessory products: a mobile television receiver device with battery charger for smart phones and tablets, and a mobile television receiver for the automotive market. Managed product requirements with potential OEM's and took both designs to production in Asia.
- Certified 5 commercial handsets with FLO TV for Verizon Wireless and AT&T

**Senior Director, Engineering, OmniTRACS**

**2002 – 2006**

**Project Engineer for 2nd generation truck communications system.**

- Architected new mobile computer, satellite modem, color graphics touchscreen display, and remote control device for the OmniTRACS truck communications system, delivering significant improvements in manufacturability and reliability from previous version, while increasing data rate 10X and enabling compelling new mobile applications.
- Received 4 patents for:
  - Compact Display Unit.
  - Hardware Continuity Loop for Preventing Vehicle Misappropriation.
  - Vehicle Identification System.
  - Routing drivers to trailers effectively.

**Director, Engineering, Globalstar Group**

**1997 – 2001**

**Hardware Lead for Globalstar Gateway and Project Engineer for Globalstar aviation system.**

- Led design, development, and world-wide deployment of 38 configurable Earth Station gateway for the Globalstar satellite communications system.
- Expanded business opportunity by adapting use of Globalstar satellite phone into a high-speed internet access terminal for the aviation market. Orchestrated series of airborne demonstrations for government and commercial entities, and then produced the final FAA certified product designs.

## **EDUCATION**

**Bachelor of Science**, Electrical Engineering Technology

DeVry Institute of Technology, Phoenix, AZ

**Bachelor of Science coursework completed**, Chemistry and Electrical Engineering,

University of California, Los Angeles, CA (UCLA)

**Certificate**, Communications Theory and Signal Processing

University of California Extension, San Diego, CA (UCSD)