# Kalyan C Pentapalli

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## **Professional Experience**

#### Senior Design & Strategy Engineer, T-Mobile | 03/2008 - Present

- Leading two undisclosed high priority projects to develop Crowd Sourced Indoor Location Solutions from a proof of concept stage to the live network
- Internal technical lead to strategically guide cross-functional teams and contribute to working towards the
   FCC Fourth Report & Order
- Lead internal teams and external vendors to achieve FCC mandated multi-year E911 regulatory compliance milestones. Met the first and second year milestones 60 days and 90 days ahead of schedule respectively; on track to meet the third milestone 180 days ahead of schedule
- Requirements definition, implementation leadership and optimization for E911 and Location Based Services on the 3<sup>rd</sup> and 4<sup>th</sup> generation wireless networks
- Led the deployment of enhanced encryption technology to secure the network against snooping, completed it in 3 months - 75% faster with just 20% of workforce needed for a similar rollout
- Developed a sunset strategy for the older generation location technology platform, resulting in 750K savings in RF equipment, avoiding additional hardware installation and \$MM Opex savings
- Architected a platform and android app to streamline data collection, analysis and reporting.
  - Capex savings of over \$5M in 3 years
  - o Reduced data acquisition cost by 30% saving over \$500K in 2 years
  - o 50% efficiency gain in the time to market for new handset e911 certification
- Spearheaded the transition to AGPS on the legacy GSM network, reducing the dependency on obsolete technologies resulting in significant Opex savings of over \$30M/year
- Developed an analytic framework to analyze poor performing location based services areas without extensive drive testing, saving over \$500K

#### Telecom Strategy Consultant, VeriSign | 12/2006 - 03/2008

Pre-sales support for LBS offerings and specializing in Telecom Networks deployment Strategy

- New LBS architecture deployment assessment: Led the strategic assessment of multiple emergency LBS vendors, emphasizing the Life Time Value of the system based on prior experience
- Managed the rollout of a new interface for the location technology network architecture by working with the vendor and multiple cross functional teams across 32 markets by leading a team of 4 consultants
- Created and managed a training program for new team members, which decreased average ramp up time by 50%. The program was used over a span of two years to effectively manage employee churn

#### Radio Frequency Engineer, inCode Telecom | 02/2004 – 11/2006

Wireless Network Optimization and Location Based Services Deployment Engineer

- Subject Matter Expert (SME) for the deployment of the UTDOA location based services architecture in several markets across the nation. Led the market through the different phases of the deployment including initial design, deployment, optimization, functionality testing of the new nodes and customer acceptance testing report evaluation to ensure successful operational stability of the deployed networks
- Provided Operational Support Training of the Market field technicians by conducting multi day handson training sessions in multiple markets across the nation
- Performed network optimization tasks by interfacing with the engineering team to review key
  performance indicators, monitor wireless performance, identifying and rectifying issues. The Operator
  call quality ranking jumped from 4<sup>th</sup> to 1<sup>st</sup> in a span of 6 months
- Established the GSM 850 MHz overlay network in conjunction with the wireless operator RF team to increase coverage and traffic capacity

# **Design Engineer, MCPS Inc.** | 10/2003 – 2/2004

Data Collection and Optimization Engineer for newly deployed wireless networks

- Developed a best-practice document on optimizing the first ever 3G UMTS trial network in the US, involving data acquisition, analysis and adjustment of various network parameters
- Data acquisition and analysis to assess new feature impact following a software upgrade

## **Technical Skills**

Data Analysis: SAS & RDatabases: SQL & AccessAndroid App Development

Productivity: MS Office Suite & Visio

#### Education

Haas School of Business, University of California at Berkeley

Part-time MBA Candidate – Class of 2018

University of Texas at Arlington, Arlington TX | 2000 – 2003

Master of Science in Electrical Engineering

Madras University, Chennai TN India | 1996 – 2000

Bachelor of Science in Electronics & Telecommunication