

## Employment

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<b>Software Engineer</b>	<b>Pearl Auto, Scotts Valley CA</b>	<b>Dec 14 – Current</b>
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- Early employee in Software team, worked on Pearl RearVision, the wireless backup camera and alert system
- Primary responsible for Linux system bring up, Power management, BTLE architecture, MFi software support and several system services running under Linux & RTOS
- Led efforts around CAN bus software development for the OBD car adapter
- Brought up prototype platforms using Raspberry Pi and Odroid XU4 for early proof of concept system

<b>Software Engineer</b>	<b>Apple Inc., Cupertino CA</b>	<b>Jan 11 – Dec 14</b>
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### iOS Motion and Location Group

- Developed a set of new CoreMotion framework API for distance estimation and flights on iOS 8
- Prototyped machine learning regression algorithm on a memory-constrained M7 co-processor
- Innovated Pedometer calibration techniques to reduce error (by 10%), resulted in filing of patents

### Special Projects Group, Apple Watch

- Founding member of the software team, worked on implementing fitness algorithm using heart rate sensor, accelerometer to compute total calorie consumption, also developed user data collections apps

### iPod Software Engineering

- Led firmware efforts for development of new Lightning connector and Lightning to 30 pin adaptor
- On iPod developed a new interface similar to USB HID to support new connector and accessories
- Worked with MFi and QA teams to ensure compatibility of new adaptor with existing accessories
- Interviewed over hundreds of candidate (phone screen, on site interviews) for positions in the group

<b>Graduate Intern</b>	<b>Cisco Systems, San Jose CA</b>	<b>May – Aug 10</b>
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- Developed new API's for managing Lock free Trace buffers and memory tracking through named Malloc extensions; deployed in production software.

<b>System Software Engineer</b>	<b>ST-Ericsson, Bangalore India</b>	<b>Oct 07 – Jul 09</b>
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- Module lead for Video Telephony, Call modules in the application stack for 3G reference platform
- Worked with OEM based in China and South Korea to integrate this platform into their phones

## Education

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<b>Pittsburgh, PA</b>	<b>Carnegie Mellon University</b>	<b>Dec 10</b>
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- M.S. in Electrical and Computer Engineering
- Coursework and research focussed on Embedded Real time systems and broader Computer Systems area

<b>Trichy, India</b>	<b>National Institute of Technology</b>	<b>May 07</b>
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- B.Tech. in Instrumentation and Control Engineering

## Projects

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- **Set Solver** (Current). Working on an iOS app which detects valid sets from a picture of cards using OpenCV
- **Identifying tags from millions of text question** (Fall 13). Performed data analysis on 6 million Stack Overflow questions and built a Machine learning classifier for each of the top 500 tags. Report at <http://goo.gl/3kb4aN>
- **x86 Kernel from scratch** (Spring 10). Wrote a UNIX like kernel with Multithreading, Preemptive Multitasking

## Languages and Technologies

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- C++, C, Python, Objective-C, bash, assembly (x86, arm)
- Source control (git, svn), Xcode, gdb