

# AMAR CHANDOLE

## EDUCATION

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**M.S. in Computer Science - University of California, Los Angeles** *Sep 2016 – Dec 2017 (expected)*

*Coursework:* Advanced Computer Networks, Advanced Computer Architecture, Network Protocol and Systems Software Design for Wireless and Mobile

**B.E. in Computer Science (IT) - Pune Institute of Computer Technology (GPA: 3.8/4.0)** *Aug 2012 - Jun 2016*

*Coursework:* Data Structures, Design & Analysis of Algorithms, Operating Systems, Computer Networks, Distributed Systems, System Programming, Database Management Systems

## TECHNICAL SKILLS

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| <b>Programming Languages:</b> | C, C++, Python, Java, Shell Scripting, Go, R                            |
| <b>Frameworks and Tools:</b>  | Docker, Hadoop, Django, Git   |
| <b>Web Technologies:</b>      | HTML5, CSS, JavaScript, jQuery, PHP                                     |
| <b>Databases:</b>             | MySQL, PostgreSQL, MongoDB, Cassandra                                   |
| <b>Specialization Areas:</b>  | Networking, Filesystem Architecture, Linux kernel/userspace development |

## PROFESSIONAL EXPERIENCE

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**Ryussi Technologies, Pune** *Jun 2016 – Aug 2016*  
*Software Engineering Intern* **(Docker, Go)**

- Developed a 3-in-1 Docker Engine volume plugin (for ZFS Pools, SMB shares, NFS shares)
- Enables users to mount anywhere on the host to get persistent storage, even if the Docker volume is removed

**Soft Corner, Pune** *Nov 2014 – Dec 2014*  
*Software Engineering Intern* **(Django, MongoDB, JavaScript, jQuery, HTML5, CSS)**

- Developed a generic form generator web application (similar to Google Forms)

## PROJECTS

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**CapProbe over MPTCP – networking** *Ongoing*  
• Developing a scheduler for Multipath TCP using CapProbe to estimate path capacities and select best possible path **(C, Bash)**

**Bit rate as a measure for MPTCP Path Manager – networking** *Ongoing*  
• Modifying default MPTCP Path Manager so as to select an interface based on its signal strength and bit rate **(C++, Bash)**

**Measuring IO operations of Android applications – filesystems** *Ongoing*  
• Modifying the Android Linux Kernel to measure and analyze IO operations performed by different Android applications. **(C, Bash, Java)**

**Content-based Storage Mode in Btrfs – filesystems** *Sep 2015 – Feb 2016*  
• Developed a mode for Btrfs filesystem that enables storage and retrieval based on hash of the file contents **(C, Bash)**  
• Enhanced file retrieval speed by **about 30%** and introduced **inherent file-level deduplication** to save storage space

**REST Library for content-based storage in Btrfs – filesystems** *Feb 2016*  
• Developed a library to interface the REST API calls to the content-based storage in Btrfs **(Python)**

**Benchmarking Tool for content-based filesystems – filesystems** *Feb 2016*  
• Developed a tool that assists in testing I/O performance of filesystems working on content-based storage principle **(C, Bash)**

**HTTP Log & TCP/IP Data Summarization and Analysis – networking** *May 2015 – Jun 2015*  
• Developed separate comprehensive analyzers for processing & analyzing HTTP logs, .pcap files **(Java, Python, D3, jQuery)**

**Result Analyzer – regex, databases** *Aug 2014 – Oct 2014*  
• Developed a regex-based parser that scraped exam result PDFs to populate the database **(Java, MongoDB, Cassandra)**

## AWARDS

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**Best Project Award** - 5 awards at 3 nationally contested project competitions for the project *Content-based storage mode in Btrfs* including *Best Innovation Award*.

**Best Sci-Fi Idea Award:** *V2R – human Vibes to Reality*, a hypothetical futuristic communication system based on brain waves.