# Ashish Gupta

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# **EDUCATION**

#### **PUNE UNIVERSITY**

BE IN INFORMATION TECHNOLOGY Graduated May 2015 | Pune, IN

Pune Institute of Computer Technology

# HANDIFS

Github - ashmew2 Freenode IRC - ashmew2 CodeForces - ashmew2 Linkedin - ashmew2 Ubuntu Forums - ashmew2 KolibriOS Forums - ashmew2 CodeChef - ashmew2

# COURSEWORK

# **UNDERGRADUATE**

Algorithms and Data Structures "System Design Advanced Operating Systems Compiler Design Advanced Computer Networks Computer Networks and Technology Distributed Systems

# SKILLS

# **PROGRAMMING**

C • C++ • Python • Emacs Lisp BASH • i386 Assembly Click Modular Router • GNU Make

#### **TECHNOLOGY / TOOLS**

Capistrano • Wireshark • GNU / Linux Git • SVN • Mercurial • Emacs IRC • Jenkins

# **INTERESTS**

Free and Open Source Software GNU / Linux **Problem Solving Functional Programming** Protocol Design **Physics** Game development

# **EXPERIENCE**

## RAKUTEN INC | OCT 2015- PRESENT

Tokyo, Japan

- Core API Development
- Automation with Ruby, Shell and Python
- System Design and troubleshooting

## WIRELESS MESH NETWORKS | DEC 2014 - MAR 2015

Improving bandwidth utilization in 802.11s Linux WMN

- Packet routing in userspace using Click Modular Router.
- Multiple internet gateways for routing traffic for increased throughput.
- Higher resilience of networks as more points of connectivity can be found.
- Demonstrated with experimental data that linear gains are possible.

## KOLIBRI OS | ONGOING

A tiny OS Written in x86 Assembly

- Started official Netsurf Web Browser port for KolibriOS.
- Implemented a C <=> Assembly layer for using libraries.
- Developing a Cross Compiler for i586-unknown-kolibrios GNU Triplet Toolchain.
- Wrote a GUI library in C which interfaces with Kolibri Kernel (in assembly).
- Mentor for Google Summer of Code 2016.

#### PIDGIN INSTANT MESSENGER | MAY 2013 - SEP 2013

Improve File Transfer Support in Pidgin

- Reverse engineered the libjingle protocol used by Google Talk for file transfers.
- Implemented the reversed libjingle into into Pidgin's Google Protocol plugin.
- Documented the working of the libijingle protocol on the IM Freedom wiki.

# THE CLASH MCQ SYSTEM | JUL 2012 - SEP 2012

A System for hosting intercollege programming competitions

- Created for the PICT IEEE Student Branch.
- This sytem replaced paper questionnaires with digital copies.
- Contest hosted over a LAN with a PyQt interface.
- Designed several question sets of algorithmic and ad-hoc problems.

# **ACHIEVEMENTS**

# **ACM ICPC** | ASIA REGIONALS

International Collegiate Programming Challenge. December 2012 | IIT Kanpur | Rank 54 December 2013 | ASE Bangalore | Rank 110

December 2013 | IIT Kanpur | Rank 36.

#### **GOOGLE SUMMER OF CODE | GSOC**

Student in 2013 for Pidain Student in 2014 for KolibriOS Mentor in 2016 with KolibriOS