# CHAITANYA CHOUDHARY NETTEM

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### **SUMMARY**

Masters student in Computer Science interested in data structures, algorithms and web applications. Actively searching for Software Development Internship position for summer 2014.

### **SKILLS**

#### Languages:

- · Expertise in Python and C
- Proficient in C++, Perl
- Familiar with R, JavaScript

### Operating System Tools:

- Strong fundamentals in Linux
- Sed, Awk, Grep, Shell scripting and Socket Programming

### Frameworks and Tools

- jQuery, web.py, Django
- Apache HTTP Server
- · OpenGL, pthreads, Git

### **EDUCATION**

# University at Buffalo, the State University of New York

Aug 2013 - Dec 2014

- Master of Science (Computer Science)
- Courses: Operating Systems, Analysis and Design of Algorithms, Computer Security and Computational Biology

### Visvesvaraya Technological University, India

Aug 2009 - Jun 2013

• Bachelor of Engineering (Computer Science and Engineering)

### RECENT PROJECTS

# Fall Detector with Raspberry Pi

Ongoing

Proposal accepted for Pycon 2014 (https://us.pycon.org/2014/schedule/presentation/104)

- This project makes use of the Raspberry Pi with a USB camera and detects falling objects.
- The goal is to detect a falling human in real time under differing lighting circumstances.
- OpenCV is used as the image processing library with Python.

### **Price Comparison Engine**

Mar - May 2013; Dec 2013

Started as final project (Bachelor of Engineering) during Mar – May 2013

- Visit at <a href="http://chaitan.cloudapp.net/justcompare">http://chaitan.cloudapp.net/justcompare</a>
- Objective was to create a search engine for book prices in Indian retail sites.
- Involved writing several scrapers using Python with the BeautifulSoup and the psycopg2 libraries.
- Website implemented with HTML, CSS, JavaScript, the web.py framework and PostgreSQL full text search.

# **Multithreaded Web Server**

Oct 2013 - Nov 2013

Operating Systems Course Project (<a href="https://github.com/chaitanyanettem/webserver">https://github.com/chaitanyanettem/webserver</a>)

• Implemented a HTTP/1.0 web server which handles GET requests.

- The web server runs separate threads to listen for, schedule and execute requests.
- Used the pthreads library in C to perform multithreaded programming with synchronization.

# **INTERNSHIPS**

# **Genetic Algorithms for metabolomics**

Dec 2011 - Jan 2012

Indian Institute of Science, Bangalore

- Assisted in research regarding viability of Genetic Algorithms as a technique for metabolite assignment.
- Data from Nuclear Magnetic Resonance of metabolite samples was used for testing.
- Implemented and tested genetic algorithms in R and compared them against traditional methods such as binning and Bayesian modelling.

### **SNMP Network Monitor**

Dec 2010 - Jan 2011

Bharat Petroleum - Greater Noida

- Primary responsibility was design and development of Network Monitoring System based on SNMP.
- The objective was to monitor links for maintenance of Service Level Agreements with ISPs.
- Developed, tested and deployed the system for BPCL Integrated Data Centre routers where it is still in use.