AMIT CHAHAR

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EDUCATION

University of Pune, Pune   *2012-2016*
Bachelor of Engineering(Computer Engineering), 8th Semester
Overall Percentage: 67%, Tenth position in Department

B.R.C.M. Public School, Bhiwani   *2010-2011*
CBSE, Class XII (Physics, Chemistry, Mathematics)
Percentage: 89%, Third Position in Class

B.R.C.M. Public School, Bhiwani   *2008-2009*
CBSE, Class X (Science, Mathematics and English)
Percentage: 90%, Second Position in Class

SCHOLASTIC ACHIEVEMENTS

- Merit scholarship for excellent academic performance in class 10 and class 12 .
- Prime minister scholarship in year 2012, 2013, 2014 and 2015.
- Merit Scholarships by Indian Army for excellence in academics in the year 2014 and 2015.
- Scholarship by Haryana Government for achieving excellent rank in AIEEE.
- AGIF scholarship in 2015-16 academic year for excellent performance in 3rd year of engineering.

PROJECTS

Learning Non-linear Dynamical Systems From Raw Images   January 2016 - Present
· Implemented Stacked autoencoders and neural network prediction model with separate training.
· Used pendulum dataset for training and predicted the position of the pendulum after a given time interval.
· Currently implementing joint training method for faster training and prediction.

Docker Management Using Libvirt API   August 2015-December 2015
· Fourth year project for degree completion and completed ahead of time.
· Implemented docker management library to integrate it with Libvirt API.
· Open source project sponsored by Calsoft Inc, Pune.

Ranking of Research Papers by Applying PageRank algorithm on the graph generated from the information of references section   April 2015-August 2015
· Used SNAP research papers dataset for generating the graph structure.
· Used javascript to develop an interactive graphs which show the important patterns in the dataset.
· Used pageRank to rank papers according to their importance.

In-Depth Visual Analysis of Large Text Documents   March 2015

· Studied about natural language processing, text mining and distant reading.
· Used C99 algorithm for topic segmentation.
· Used SmoothScroll, bar charts and word clouds for summarizing the document.

Wireless Environment Sensing Network with IoT extension   Feb 2015 - March 2015

· Used ARM Cortex A8 (BeagleBone Black)
· Developed an environment sensing node with LM35, DHT11 temperature and humidity sensor, and accelerometer.
· Used this concept in developing a smart wheel chair with a heartbeat sensor using op-amp and photo-diodes.
· Frontend was developed as a webpage, served by coordinator using jsp with backend in Python.

Classifying E-mails Using Decision Trees and Naive Bayes'   Nov 2014 - Dec 2014

· Developed Python scripts to extract words from emails and classifying emails.
· Utilised numpy and scipy python libraries for matrix and array calculations.
· Utilised matplotlib to draw graphs for data visualization.

University DBMS Using MongoDB, JavaScript and JSP   July 2014-September 2014

· Implemented a GUI based three tier architecture to manage all university information at a central point.
· Studied different web-application architectures, working and their implementation using jsp.

INTERNSHIP AND WORK EXPERIENCE

Teaching Assistantship   July 2015 - November 2015

· Worked as TA during 1st semester of final year (had to leave due to intership in 2nd semester).
· Taught programming skills and algorithms to first year students.

Project Intern at Calsoft Inc., Pune   August 2015 - March 2016

· Worked on open source project on docker management using libvirt API (also mentioned in projects section).
· Completed ahead of time with 'A' grade from company.

Internship at Commvault Systems, Hyderabad   December2015 - Feb 2016

· Worked on big data analysis (log monitoring) with faceted browsing using Apache solr.
· Developed java programs to take SQL as input and convert it to SOLR json query format.
· Improved efficiency of faceted search on the indexed data in commvault product.

Remote Internship at TunnelPI Inc., Banglore (a startup)   March 2016 - April 2016

· Developing secure network for IOT (Internet of things) communication.
· Will be demonstrated for the use in smart city projects across India.

PUBLICATIONS

- **Docker Management Using Libvirt API**, Amit Chahar, Prof. P.R. Sonawane, Ajay Shekhawat, Ankit Mishra, Komal Kumari, *International Journal of Advance Engineering and Research Development* Volume: 03, Issue: 02: 266-271, February 2016.

- **Learning Non-linear Dynamical Systems From Raw Images**, Amit Chahar, Prof. Sunil Dhore, Anil Kumar, Venkata Ramesh L, Rohit Rajput, *International Journal of Advance Engineering and Research Development*, paper accepted and ready to be published.

TECHNICAL STRENGTHS

Computer Languages	C/C++, Python, Java, Shell Scripting, NodeJS, Latex, Qt, Javascript
Protocols & APIs	XML, JSON, SOAP, REST
Databases	MySQL, MongoDB, Microsoft SQL
Tools	Sublime Text, Visual Studio, Eclipse, Android Studio
Operating Systems	Linux, Embedded Linux, windows
Platforms	x86, ARM Cortex A8

AWARDS AND ACHIEVEMENTS

- 2nd position in class during B.E. first semester.

- Successfully completed many MOOCs related to algorithms, machine learning and android programming on EdX, COURSERA and UDACITY.

- 3rd position in codeRed, programming competition in college techfest, in 2013.

- Rank 650 on HackerRank, a web-site that organizes programming contests.

- All India Rank59 in Build The Shield-2015, hackathon organised by Microsoft

- Above 83 % national percentile in AMCAT in all domains.

EXTRA CURRICULAR

- Team member of college cricket team.

- Co-founded Charity Leaf, a trust which supports physically disabled children.

- Regular student of MOOCs from websites like edx, coursera and udacity.

- Attended workshops on Android Application Development and iOS application development.

- Attended workshops of windows applicaton development organised by Microsoft.

HOBBIES

Strategy based video games, competing in typing speed and programming contests and photoshop.

REFERENCES

Prof. S.R. Dhore
- Professor and Head of Deptartment(HOD) of Computer Engineering
- Army Institute of Technology
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- Email: hodcomp@aitpune.edu.in

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- Asst. Prof., Department of Computer Engineering
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