Bharath Venkatesh

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bharath.venkatesh@student.kuleuven.be | bhatturam.github.io | 8th May 1988 | INDIAN |

EDUCATION

KU LEUVEN
Advanced Master in Artificial Intelligence
Expected Oct 2016
Semester 1 Per: 69.53

IISC BANGALORE
M.Sc(engg) Computer Systems
2010-2013
GPA: 6.2/8

NIT TRICHY
B.Tech Mechanical Engineering
2006-2010
GPA: 7.87/10

COURSEWORK

GRADUATE
Machine Learning
Data Mining
Programming for Big Data
High Performance Computing
Bioinformatics
Computer Vision
Uncertainty in AI
Robotics
Probability and Statistics
Linear Algebra

UNDERGRADUATE
Mechatronics
Engineering Design
Engineering Mechanics
Object Oriented Programming
Operations Research
Project Management

SKILLS

PROGRAMMING
Languages
Java • C++ • C • PERL
MATLAB • SQL • Javascript
R • Python • PHP • PROLOG
Frameworks:
Android • OpenCV • Arduino •
Scikit-learn • WEKA • GNUPLOT
MPI • CUDA • OpenMP

WEB AND GRAPHIC DESIGN
Photoshop • CSS

ENGINEERING DESIGN
AutoCAD • CATIA • ANSYS

EXPERIENCE

SAP Research Engineer, Design of New Applications Unit
July 2013 – July 2015 | Bangalore
Project Genomics

- Developed an R package for topological pathway analysis based gene expression data.
- Developed an extensible tool in Java to generate synthetic data to benchmark Next-Generation Sequencing(NGS) Alignment and Variant Calling Algorithms.

Project Wellbeing

- Conceived, designed, architected end-to-end and lead implementation efforts for a low cost system to track the height and weight of children in rural India.
- Worked on the implementation of a system to recommend users products and services from local businesses based on user vital data captured by a smartphone.
- Contributed to all aspects of software development of a mobile application and the associated backend - database organization, RESTful API design and Android programming.

RESEARCH AND PROJECTS

- Developed an efficient algorithm for the infrastructure level detection of Structured Peer-to-Peer Botnets based on graph clustering as a part of my Masters Thesis at the Information Security Lab at IISc.
- Developed graffy, a high performance graph library in C++,The library is available at GitHub and has been used in various projects in social network analysis at the Information Security Lab at IISc.
- Worked on image processing projects in solid and fluid mechanics at Aerospace and Applied Mechanics Departments at IIT Madras and contributed to software used in the labs.

PUBLICATIONS

Journal

Venkatesh, B., Choudhury, S. H., Nagaraja, S., & Balakrishnan, N. (2015). BotSpot: fast graph based identification of structured P2P bots. Journal of Computer Virology and Hacking Techniques 11 (4), 247-261

Conference

Ravi, S., Balakrishnan, N. & Venkatesh, B. (2013). Behavior-based Malware Analysis using Profile Hidden Markov Models. Security and Cryptography (SECRYPT), 2013 International Conference on, 1-12

In Submission

Patil, Shailesh S., Bharath Venkatesh, and Randeep Singh. "From Differentiated Genes to Affected Pathways." preprint/bioRxiv (2016): 038901.

CLUBS AND SOCIETIES

2008-2010	President	Webteam of NIT Trichy
2008-2010	Class Representative	Mechanical Engineering Class of 2010 NIT Trichy
2009	Manager	Graphic Design Team NIT Trichy
2008	Joint Secretary	Mechanical Engineering Association NIT Trichy