Ajay Bhatia

CONTACT
INFORMATION

Escorts Street, Manavta Nagar, Sutehri Road
Hoshiarpur, Punjab, INDIA 146001

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EDUCATION

Punjab Technical University, Jalandhar INDIA

Pursuing Ph.D. Computer Science, September, 2012.

- Dissertation Topic: "Pattern Analysis of Physical Activity Data using Computational Approach"
- Advisor: Rajeshwar Singh, Ph.D., Campus Director, DKTGI, Shaheed Bhagat Singh Nagar, Punjab, INDIA
- Co-Advisor: Vijay Mago, Ph.D., Assistant Professor, Lake Head University, Thunder Bay, ON P7B 5E1, Canada

University Grant Commission, New Delhi INDIA

National Eligibility Test for Junior Research Fellowship and Eligibility for Assistant Professor, December, 2012.

The ICFAI University, Dehradun, Uttarakhand INDIA

Masters of Computer Applications, September, 2007

Guru Nanak Dev University, Amritsar, Punjab INDIA

B.Sc.(Information Technology), May, 2004

HONORS AND
AWARDS

B.Sc.(Information Technology) with Disctinction, 2004

Fourth Position earned in B.Sc., (Information Technology), 2004

First in College in Univeristy Examination, 2004

First in College Examinations, 2003

DAVCMC Scholarship, 2003

First in College Examinations, 2002

First in College Examinations, 2001

PROFESSIONAL
EXPERIENCE

Micromax Informatics Ltd., 90-B, Sector 18, Gurgaon 122015, INDIA *Technical Consultant*   **June, 2016 - Current**
Consultation of various internals of development in Mobile and Web apps like *http://download.yuplaygod.com* and *http://developer.yuplaygod.com*

Tri Infotech, Punjab *CEO*   **July, 2016 - January, 2018**

Career Escorts, India *CTO*   **July, 2017 - January, 2018**

Thicket Labs LLC, 67 West Street Brooklyn, NY 11222 *Senior Software Developer & Project Manager*   **May, 2014 - March 2016**

Designed and Developed *The Possibilty Engine* - A comprehensive solution to manage human complexity

Freelancer (Software Project Management & Development)   August, 2004 - Current

Rayat Bahra Institute of Management, Hoshiarpur, Punjab INDIA

Associate Professor, Department of Management & IT   **July, 2010 - present**
Head of Department(IT), Teaching graduate and postgraduate courses in IT

CT Institute of Management & IT, Jalandhar, Punjab INDIA

Assistant Professor   **March, 2008 - July, 2010**
Taught graduate and postgraduate courses in IT

RESEARCH
INTERESTS

Android Platform, Medical Informatics, Decision making, Mathematical modelling, Fuzzy systems, Optimization techniques, Linux Kernel tunning and optimization

REFEREED
ARTICLES

Bhatia, A., Singh, R. 2012. *Using Bayesian Network as Decision making system tool for deciding treatment plan for Dental caries*, Journal of Academic and Industrial Research, 2(2), pp 119-122.

Bhatia, A., Singh, R. 2012. *Backpropagation Multilayer Feedforward Neural Network for deciding treatment for broken Tooth*, Journal of Academic and Industrial Research, 2(2), pp 93-96.

Mago, V.K., Mago, A., Bhatia, A., Bhatia, N. 2012. *Clinical Decision Support System for Dental Treatment*, Journal of Computational Science, 3(5), pp 254-261, Elsevier.

Singh, R., Marwaha, H., Bhatia, A. 2012. *The Projective Future of RFID in Indian Shopping Malls*, International Journal of Science & Emerging Technologies with Latest Trends, 1(1), pp 70-73.

Bhatia, A., Singh, R., Mago, V.K. 2011. *A Decision Making System for the Treatment of Fractured Tooth*, Journal of Computer Science, 1(2), pp 1-3.

Mago, V.K., Bhatia, A., Prasad, B., Mago, A. 2009. *A Fuzzy Expert System for Decision Making in the Treatment of Broken Tooth*, International Conference on Artificial Intelligence and Pattern Recognition. Florida, USA. pp 268-277

Mago, V.K., Devi, M.S., Bhatia, A., Mehta, R. 2009. *Using Probabilistic Neural Network for Selection of a Super Specialist Medical Agent*, Multi-Agent Systems for Health Care Simulation and Modeling. IGI Global, USA, pp 164-177.

Mago, V.K., Prasad, B., Bhatia, A., Mago, A. 2008. *A Decision Making System for the Treatment of Dental Caries*, Soft Computing Applications in Business, Studies in Fuzziness and Soft Computing. B. Prasad Eds., Springer-Verlag, Germany, pp 231-242.

CONFERENCE
PRESENTATIONS

Bhatia, A., Kumar S., Mago, V. K. Gradient: A User-Centric Lightweight Smartphone Based Standalone Fall Detection System. 17th Portuguese Conference on Artificial Intelligence. EPIA Conference 2015. Sep., 2015. Proceedings in Springer, LNAI Series.

Bhatia, A. ; Punjab Tech. Univ., Kapurthala, India ; Mago, V. ; Singh, R. Use of soft computing techniques in medical decision making: A survey. Advances in Computing, Communications and Informatics. ICACCI 2014.

Bhatia, A., Deep, G., Singh, R. 2012. Using Back Propagation Neural Network for Sales Forecasting

based on Monthly Sales. ICUTIT 2012. PCTE, Ludhiana.

Bhatia, A., Deep, G., Maini, P. 2012. Cause Advertising-A Tool for Social Problems Eradications. IMCMC 2012. PCTE, Ludhiana.

Singh, R., Marwaha, H., Bhatia, A. 2012. The Projective Future of RFID in Indian Shopping Malls. HR Summit 2012. KCL Institute of Management & IT, Jalandhar.

Marwaha, H., Begowal, R., Bhatia, A. 2012. Woman: A Bread Baker and Bread Earner Using IT. RWITTT-2010. PCMSDCW, Jalandhar.

PROFESSIONAL ACTIVITIES

Design, Develop & Lead Student Tracking System. A real-time student progress tracking system. The product is under construction which spans over web and mobile domains using MERNG stack

Design, Develop & Lead School Bus Tracking System. A real-time school bus tracking system for our client. The product is under construction which spans over web and mobile domains with GPS and Maps solutions. We are using MERNG stack for this solution

Design, Develop & Lead Language Lab - An Android App for the project mentioned

Design, Develop & Lead Language Lab - A Web App, a voice-recognition and synthesis system with language translation on run-time using bots. The product is developed in Meteor full-stack with GraphQL, React and Mongoose. We developed our own voice-recognition and synthesis system for this product

Design, Develop & Lead Bachpan SAP - An Android App (Student Assessment Programme), an ERP Solution for School Management, Employees, Students and Parents. The automation based software solution is capable of managing all resources of school with more than 15 modules.

Design, Develop & Lead Bachpan SAP - A Web App (Student Assessment Programme), an ERP Solution for School Management, Employees, Students and Parents. The automation based software solution is capable of managing all resources of school with more than 15 modules. The product is fully developed in Meteor framework on Full-stack with mix of Blaze and React

Project Lead https://www.ahpshoshiarpur.com/, a website in wordpress for Academic Heights Public School, Hoshiarpur

Project Lead https://www.bachpanhoshiarpur.com/, a website in wordpress for Bachpan School, Hoshiarpur

Design, Develop & Lead Career Escort, an Android App made using Cordova integration technology with Meteor for Real-time APIs.

Design, Develop & Lead Patron Career, a real-time job portal for managing jobs, hire & recruitment, payroll management, job time-frame management and others. The product is developed in Meteor framework using a mix of Blaze and React front-end with Mongoose as back-end

Design, Develop & Lead Addo, a restaurant management cross-platform application for uengage.in

Design & Developed GSTNext, a cross-platform and cloud based solution for GST with Inventory Management, Billing, and Accounts Management

Developed & Design Optician Management System, a desktop app in Java which in use by many

Opticians at my native place for managing Optical Inventory and Patients with their vision data

Developed & Design Prabandhan, a desktop app in Java for managing Inventory of any business and is implemented at various business houses

Developed & Design http://www.sgndetrust.org/, a web app in wordpress for Shri Guru Nanak Educational Trust

Developed & Design http://www.himtinstitute.com/, a web app in django frameworks for HIMT which also contains ERP for managing Admissions

Developed & Design http://www.triinfotech.in/, a web app in django and web2py Python frameworks for Tri Infotech Inc which also contains blog and Quiz app

Developed & Design http://playgoods.in/, an e-Commerce platform for selling Play Goods for Play Goods Inc India

Developed & Design YuPlayGod Downloads (Official) [http://download.yuplaygod.com/], a web app for maintaining various ROM builds for YU series of smartphones

Developed & Design YuPlayGod Developers (Official) [http://developer.yuplaygod.com/], a web app for Project Highway by YU Televentures

Developed & Design http://www.taxicabdulles.com/, a website for cab company in Dulles (US)

Developed & Design http://www.mrsinghphotography.com/, a web app for professional photographer

Developed & Design PhotoBucketStudio, a web app for sharing professional photography work

Developed & Design http://www.kespripane.com/, a punjabi dictionary and search engine

Developed & Design Xtreme Sense, an android app for collecting and syncing human activity data using different sensors to cloud

Developed & Design http://tpengine.com/ is the web application for handling and implementing Fuzzy Cognitive Maps for real-time/life scenarios. It uses The Possibility Engine API as back engine. This is fully data-driven web application made in full-stack web framework Java Server Faces 2.2. The web container and server used to deploy this web app is Glassfish. The project is developed for Thicket Labs LLC, NY

Developed & Design The Possibility Engine, a library for Fuzzy Cognitive Maps in Java for Thicket Labs LLC, NY

Developed Inventory & Stock Management System for an elecronic mall in .Net Technologies

Developed & Design APS (Automatic Profile Selector), an android app which sense the human activity and set profiles according to the preference set for the activity

Developed & Design http://www.drinking.dachb.co/m, a survey web app for collecting data of Binge drinkers

Developed & Design http://cheal.info/, a Computational Healcare (cHeal) Lab website for Lakehead University

Developed TECHN0VIBES 2015/2016 - an IT Club website for managing various activities and for administrative purpose in Python/web2py https://itclub.pythonanywhere.com

Developed & Design Xtreme Power, an android for double tap or wave proximity sensor for making screen on and off

Developed & Administrate Online Quiz Application in web2py/Python/HTML/CSS for RBIM, Hoshiarpur (2010-Present)

Developed & Design Xtreme Cam, an android app/service like Moto X's twister service which open camera

Web Hosted/Domain http://luxmilifestylemahilpur.com

Developed First-Ever Kernel Worldwide (Xtreme Series by screen name *andiroxu* for MediaTek 6577 Based SoC Phone Brand MicroMax, Model Canvas 2, which supported Jelly Bean (4.2.x-4.3.x) with multiple features and optimizations for RAM, Camera, WiFi, File System and Battery

Developed Project Xtreme - a very popular MOD for android devices which was very popular on XDA Developer Forum with screen name *andeveloper*

Developed Xtreme Booster, a memory management android app for rooted devices. A very popular app on XDA with screen name *andeveloper*

Developed & Administrate Online Review of Examination (College Management System) in JSF/Servlets/JSTL/MySQL/Glassfish Application Server for CTIMIT, Jalandhar (2009-2010)

Developed website using ASP.NET/C#.NET/IIS7 for Mago Dental Clinic

Developed website for Tech Miller, UK (Now Non-functional)

TEACHING
EXPERIENCE

Programming in C and C++ languages (12 times, since 2008)

Programming in Java (12 times, since 2008)

Web Designing (4 times, since 2008)

Web Development using .Net (2 times, since 2008)

Introduction to Computers & IT (4 times, since 2008)

Data Structure (4 times, since 2008)

Digital Systems Design (3 times, since 2008)

Operating System (2 times, since 2008)

Computer Graphics (1 time, since 2008)

Database Management System (2 times, since 2008)

E-Commerce with Practical Implementation (1 times, since 2011)

Special Summer Training & Workshop on Python/Php/Java (For 4 weeks every summers, since

2011)

COMPUTER SKILLS
- Languages: C, C++, Java, Python, Node, Ruby, MATLAB, ASP.NET, C#.NET, Unix Shell Scripting, HTML, CSS, JavaScript, jQuery, Bootstrap, PHP, XML

- Frameworks/Libraries: React, React Native, Angular (2 Onwards), Vue.js, Meteor, Django Framework, Flask Micro-framework, Rails Framework, web2py Framework, JSF Framework, Laravel Framework, CodeIgnitor 2 Framework
- Machine Learning: Fuzzy logic and Neural Network toolboxes in MATLAB, all major APIs in Python and Java for Neural Networks, Fuzzy logic, Fuzzy Cognitive Maps
- Databases, Servers & Applications: Mongo, MySQL, Postgres, MS-SQL Server, Apache Webserver, GlassFish Application & Webserver, Apache, Apache Tomcat, IIS, LaTeX, Spreadsheet, and Presentation software

- Cloud Services: DigitalOcean, Heroku, AWS, Google Cloud
- Operating Systems: Gnu/Linux (Primary), Unix (BSD), Windows, Mac

Student name	Organization	Designation
Tarun Gupta	VenturePact, India	Software Engineer
Vishnu Singh Nair	Acusis Softwares, Banglore, India	Software Developer(ASP.NET/C#)
Dheeraj Singh Thakur	Sapieo Software, Noida, India	Vignette Developer(JAVA)
Ravi Singh	Baba Farid College, Bathinda, India	Assistant Professor
Richa Puri	Guru Nanak Khalsa College, Sultanpur Lodhi, India	Assistant Professor
Simarjit Singh	DIPS College, Begowal, India	Assistant Professor
Sumit Sehgal	Doaba College, Jalandhar, India	Assistant Professor
Amandeep Singh	Worked at Deftsoft Informatics. Works at Zapbuild Technologies Pvt. Ltd, Mohali, Punjab	Software Developer
Amandeep Singh Virdi	Cloudera University, India	Technology Consultant
Ankit Rajpoot	JK Technosoft Ltd., India	Senior Software Engineer
Kulwinder Singh Pannu	Pdssia IT Consultants(P) Ltd., Panchkula, Punjab	Web Developer
Kushal Sharma	Kayako Software, Jalandhar, Punjab	Subject Matter
Preeti Tripathi	Seasia Consulting, India	Product Consultant
Sandeep Verma	smartData Enterprises, Mohali, India	Senior Software Engineer
Shakti Sangwan	Vertex Infosoft Solutions Pvt. Ltd, India	Software Developer
Swati Sharma	Kapsons Solutions Pvt. Ltd, India	Software Testing Engineer
Jatinder Aery	Worked at MBD Group, India. Works at Shrachi Group	Territory Sales Incharge
Karan Mahajan	Enbake Solutions, Mohali, India	Android Developer
Megha Ahuja	Worked at NIELIT, India. Works at CGC Group, India	Software Trainer
Savkaran Singh	Wipro Infotech, India	Database Administrator
Pooja Guleria	Jarc Infotech and Seasia Infotech	Software Tester
Nikhil Arora	Guru Nanak Dev University College, India	Assistant Professor
Ravi Lamba	Evergreen Publications Pvt. Ltd., India	Software Developer
Shaveta Shukla	Worked at PT Pure Testing. Works at PureTesting, India	Software Tester
Nitin Sharma	IBM Global Services, India	IT Consultant
Vipin Sharma	Gybhs Education Pvt. Ltd., Jalandhar, India	Software Developer(.NET)
Rohit Kalia	Nitor Infotech, Pune, India	Test Analyst
Ketan Bharadwaj	Tri Innovations Pvt. Ltd., Chandigarh, India	Software Developer (Android)
Sameer Eric Naru	Pune, India	Financial Services
Harminder Singh	Sebiz Infotech, Mohali (SAS Nagar), India	Software Developer (Android)
Manish Dhir	Accenture India, Hyderabad, India	Software Tester
Richa Gupta	Impinge Solutions, Mohali (SAS Nagar), India	Impinge Solutions
Shivam Nayyar	TCS, Chennai, India	Software Developer
Hardeep Kaur	TCS, Gurugram, India	Software Developer
Saurab Saini	BlueJeans, Banglore, India	DevOps