

ARCHANA BHATTARAI

OBJECTIVE

Looking for a research or system development internship position in natural language processing, information retrieval, web search, information extraction or informatics that would best avail my capabilities while simultaneously providing opportunities for the enhancement of my knowledge.

EDUCATION

Emory University, Atlanta, GA

Doctor of Philosophy in Computer Science and Informatics

2011(expected)

Asian Institute of Technology, Bangkok, Thailand

Master of Engineering, Information and Communication Technology

May, 2007

Institute National des Telecommunication, Evry, France

Master of Science, Communication Networks and Services (Dual degree)

April, 2007

Institute of Engineering, Pulchowk Campus, Kathmandu, Nepal

Bachelor of Engineering, Computer Engineering

November, 2004

COMPUTER RELATED SKILLS

Programming languages: C, C++, Java, PHP

Databases: MySQL, MS SQL

SDLC Phases: Requirement Analysis, System Design, System Analysis, Testing and Verification

Environment: Windows, Linux, Solaris

ACADEMIC PROJECTS

Extraction of clinically or scientifically sound articles in Medical domain, used supervised algorithm, support vector machines (SVM) to detect clinically sound articles based on fed features during training. Tools and packages: Lemur, MetaMap MMTx, SVM^{light}, C++, Java, Shell Scripts

Named Entity Classification, used simple Bayes' classifier and Conditional Random fields (CRF) to classify named entities to different classes like PERSON, ORGANIZATION, LOCATION etc. Tools and packages: Java

Evaluation of DHT algorithms optimization in Mobile Ad-Hoc Networks, Masters Thesis topic to study implementation of the ad-hoc routing protocols and the distributed hash table concept. Tool: NS2

Information System for a Department of an Engineering College, Developed an enterprise application that encompassed features necessary for data organization and presentation. Tools: PHP, MySQL

Recommender System for clubs, Implemented and verified the knowledge based information retrieval algorithm, Multi attribute Utility Theory(MAUT) for the efficient and customized information retrieval. Tools: PHP, MySQL

Compiler development for C subset, Developed a pseudo C compiler, based on provided grammar using concepts of lexical analysis, syntax analysis, abstract syntax tree generation, type checking and code generation. Tools: C

E-Learning Design and Implementation in Rural Parts of Nepal(Project design), Worked in a real environment as a project manager, took a lead in the team to manage resources and execute project plan . Tools: MS Project, VISIO

SMS and online banking, Bachelor's Thesis project, developed a gateway that translated the sms text messages into suitable query usable for the database system and vice versa. Tools: JAVA, JSP, VB, MS SQL

WORK EXPERIENCE

Lecturer, Bachelor in Computer Engineering (B.E.)

Kantipur Engineering College, Tribhuvan University, Kathmandu Nepal

Nov 2004- Aug 2005

- Lectured on Artificial Intelligence and Simulation and Modeling to fourth year undergraduate students.
- Coordinated, Supervised and Evaluated various projects done by students
- System Analyst/ Programmer, MIS development Committee
 - Was involved in the requirement analysis and system design of the Management Information system for the college
 - Was involved in the database design and coding for the MIS

HONORS, PUBLICATIONS

- Recipient of Graduate School scholarship, Emory University, Atlanta, GA (2007 – 2012)
- Recipient of Finland Full Scholarship, Asian Institute of Technology, Thailand (2005 – 2007)
- Recipient of French government Full Scholarship, Institute National des Telecommunication (2006 – 2007)
- Recipient of Outstanding student stipend, Institute of Engineering, Tribhuvan University, Nepal (2000-2004)
- Recipient of Fellowship, The 8th Asia Pacific Next Generation Camp, NUS , Singapore (18-20 July,2006),
- Best Project design award, Competition on ICT project design, Asian Institute of Technology, Thailand, May 2006
- Best paper presentation award, Second National students' Conference on Information Technology, May 15, 2004, presented Paper on "Role of Information and Communication Technology in development of a country"
- Second runner up, Open Software competition, "Unnayan 2003", International Technological festival, February 12-16, 2003, Birla Institute of Technology (BIT), Meshra, India
- Member, Nepal Engineering Council (2004-present)
- Member, Nepal Engineers' Association (2004-present)
- Member, Association of Computer Engineers Nepal (2004-present)

- **E-learning in rural areas of Nepal to prepare a global citizen**, Selected papers, 8th Asia Pacific Next Generation Camp, NUS, Singapore (18-20 July, 2006)
- **Computers for the illiterate**, Zerone, Institute of Engineering, Nepal, 2003
- **Artificial Intelligence versus Humanistic Intelligence**, Zerone, Institute of Engineering, Nepal, 2002

TRAININGS, SEMINARS

- Participation, **ASIAN INTERNET ENGINEERING CONFERENCE (AINTEC)**, 13-15 December, 2005, Bangkok, Thailand
- Participation, Sixteenth Asian School on Computer Science, December 11-12, 2005, AIT, Bangkok, Thailand
- Participation, The 8th Asia Pacific Next Generation Camp, July 18-20,2006, NUS, Singapore
- Attended Cisco Networking Academy Program (CNAP) Level I, II, III and IV

ACTIVITIES

- Core organizer of "First international Technological Meet", "LOCUS 2003" held at Pulchowk Campus, Nepal
 - Seven days events including software competition, hardware competition, paper presentation and a host of guest lectures
 - Participated in by all major Engineering colleges of Nepal and Few Colleges of India
- Media coordinator on first International technological meet, "LOCUS 2003"
- President , Leo club of Kathmandu Himalayan Kingdom, 2003-2004
- International relation and club twinning coordinator, Lions Club International, Leo District Council, District 325 B, Nepal, 2004-2005

REFERENCES

Will be furnished upon request