Pandarasamy Arjunan
PhD Scholar, IIIT-Delhi

CONTACT INFORMATION

Indraprastha Institute of Information Technology (IIIT), Delhi
Okhla Industrial Estate, Phase III,
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RESEARCH INTERESTS

Middleware systems for smart energy buildings, Embedded sensing networks, Internet of Things (IoT), and Machine learning.

EDUCATION

PhD in Computer Science and Engineering, CGPA:7.9/10 *Jul. 2010 - Present*
Mobile and Ubiquitous Computing group, IIIT-Delhi, India.
Advisors: Dr. Amarjeet Singh and Dr. Pushpendra Singh

Master of Computer Applications (MCA), 83.1% *Aug. 2004 - May 2007*
Madurai Kamraj University, Madurai, India.

Bachelor of Science in Computer Science, 75.6% *Jul. 2001 - May 2004*
Manonmaniam Sundaranar University, Tirunelveli, India.

RESEARCH AND PROFESSIONAL EXPERIENCES

PhD Scholar, IIIT-Delhi, India *Jul. 2010 - Present*
– Middleware systems and services for smart energy buildings.

Summer Intern, IBM Research, Bangalore, India *Jul. 2014 - Oct. 2014*
– Anomaly detection methods for smart energy meters.
Mentors: Harshad D Khadilkar and Tanuja Ganu

Visiting Graduate Researcher, NESL, UCLA *Apr. 2013 - Nov. 2013*
– OpenBAN: An Open Building ANalytics Middleware for Smart Buildings.
Advisor: Prof. Mani B. Srivastava

Research Intern, IBM Research, Bangalore, India(part time) *Jul. 2011 - Dec. 2012*
– SoftGreen: Towards energy management of office buildings with soft sensors.
Mentor: Deva P Seetharam

Associate System Engineer, IBM GBS, Bangalore, India *Jan. 2010 - Jul. 2010*
– IBM Mainframe application programmer for insurance claim processing system.

Software Engineer, HCL Technologies, Chennai, India *Jul. 2007 - Dec. 2009*
– IBM Mainframe application programmer for retail market analysis subsystems.

PUBLICATIONS (CONFERENCE AND WORKSHOP)

Pandarasamy Arjunan, Harshad D Khadilkar, Tanuja Ganu, Zainul M Charbiwala, and Amarjeet Singh, *Multi-User Energy Consumption Monitoring and Anomaly Detection with Partial Context Information*, In 2nd ACM International Conference on Embedded Systems for Energy-Efficient Built Environments (BuildSys), Seoul, South Korea, November 2015 (accepted).

Pandarasamy Arjunan, Manaswi Saha, Haksoo Choi, Manoj Gulati, Amarjeet Singh, Pushpendra Singh, and Mani B. Srivastava, *SensorAct: A Decentralized and Scriptable Middleware for Smart Energy Buildings*, In 12th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC), Beijing, China, August 2015.

Pandarasamy Arjunan, Mani B. Srivastava, Amarjeet Singh, and Pushpendra Singh, *OpenBAN: An Open Building ANalytics Middleware for Smart Buildings*, In 12th International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous), Coimbra, Portugal, July 2015.

Pandarasamy Arjunan, Manaswi Saha, Manoj Gulati, Nipun Batra, Amarjeet Singh, and Pushpendra Singh, *SensorAct: Design and Implementation of Fine-grained Sensing and Control Sharing in Buildings*, Poster and Demo, In 10th USENIX Symposium on Networked Systems Design and Implementation (NSDI), Chicago, USA, April 2013.

Nipun Batra, **Pandarasamy Arjunan**, Amarjeet Singh, and Pushpendra Singh, *Experiences with Occupancy Based Building Management Systems*, In 8th IEEE International Conference on Intelligent Sensors, Sensor Networks and Information Processing (ISSNIP), Melbourne, Australia, April 2013.

Pandarasamy Arjunan, Nipun Batra, Haksoo Choi, Amarjeet Singh, Pushpendra Singh, and Mani B. Srivastava, *SensorAct: A Privacy and Security Aware Federated Middleware for Building Management*, In 4th ACM International Workshop on Embedded Sensing Systems for Energy-Efficiency in Buildings (BuildSys), Toronto, Canada, November 2012.

Pandarasamy Arjunan, *Occupant-Centric Federated Cyber-Physical System for Building Management*, Doctoral Colloquium, In 9th ACM International Conference on Embedded Networked Sensor Systems (SenSys), Toronto, Canada, November 2012.

Pandarasamy Arjunan, *Fine-grained Resource (Electricity) Management in Buildings*, PhD Student Forum, In 4th International Conference on Communication Systems and Networks (COMSNETS), Bangalore, India, January 2012.

Abhishek Bhardwaj, **Pandarasamy Arjunan**, Amarjeet Singh, Vinayak Naik, and Pushpendra Singh, *MELOS: A Low-Cost and Low-Energy Generic Sensing Attachment for Mobile Phones*, In 5th ACM Workshop on Networked Systems for Developing Regions (NSDR), Washington, D.C., USA, June 2011.

Invited Talks

MELOS: A Low-Cost and Low-Energy Generic Sensing Attachment for Mobile Phones, IGIT, GGSIP University, Delhi, India. (June 2011).

Introduction to C# Programming for Windows Phone 7 Application Development, IGIT, GGSIP University, Delhi, India. (July 2012).

Honors and Awards

IBM PhD Fellowship (2012–2014).
Certificate of "Honourable Mention", Poster session, COMSNETS 2012.

Professional services

External reviewer: BuildSys 2012-13, eEnergy 2013-14, ICDCIT 2013, IEEE CONECCT 2013.
Web chair: BuildSys 2014-15, eEnergy 2015.

Graduate Courses

- Mobile Computing
- Advanced Algorithms
- Fundamentals of Computer Security
- Embedded Systems
- Middlewares
- Advanced Research Methods
- Technical Writing
- Mobile and Wireless Network Security
- Ad Hoc Wireless Networks

Teaching Assistant

System Management, Computer Networks, Probability and Statistics, and Mobile Computing

Technical Skills

Programming	:	C, C++, C#, Java and Lua
Data analytics	:	R, Python (scikit-learn), Weka, MATLAB
Embedded systems	:	Atmel, PIC, FlyPort
Mobile platforms	:	Java ME, Symbian, Android
Databases	:	MySQL, MongoDB
IDEs and Tools	:	Netbeans, Eclipse, Visual Studio, Latex, NS2

References

Provided on request.