

## VIJAYALEKSHMI KESAVAN

**Email:** vijayalekshmikesavan@gmail.com

**Mobile:** +919480655011

### WORK EXPERIENCE

#### **Engineer, HealthcareMagic (August 2014 - Present)**

- Manage the entire frontend and backend stack of healthcaremagic.com being an individual contributor.
- Major Contributions:
  - Designed and implemented Restful APIs to extend our health services to third parties, a kiosk service for Rajasthan government and a portal for middle east doctors to name a couple.
  - Worked with several internal teams (operations, content management, doctors etc.) and external clients to build systems to improve operations.

#### **Senior Engineer, @walmartlabs (April 2012 - February 2014)**

- Display Advertisement Technology: Worked on building a Real Time Bidding Ad platform in partnership with external DSPs which was tailored for re-targeting users.
- Keyword Intelligence for SEO and SEM: Worked on mining relevant keywords and recommending keywords for walmart.com items. Used Google Adwords API and internal Muppet (Fast processor for streaming data) application to process keywords.

#### **Software Development Engineer, Amazon.com (July 2009 - April 2012)**

- Tiered Storage for Ordering: Managed various storage frameworks for checkout applications. Worked on order data migration from Mysql to Amazon S3 and Shopping Cart deprecation from Dynamo.
- Data Warehousing and Business Intelligence: Worked for Amazon's core DW/BI Team taking responsibilities including Data Modeling, SQL Development and Project Management, while handling massive data volumes.

### TECHNICAL INTERESTS

Algorithms, Machine Learning, Data Science, Distributed Systems

### TECHNOLOGIES WORKED ON

**Programming Languages:** Java, C, JavaScript, Python, SQL

**Databases:** MySQL, Hive, Redis

**Development Tools:** git, maven, ant, jenkins

**Web Technologies:** HTML, CSS, jQuery, Bootstrap

### EDUCATIONAL QUALIFICATIONS

Degree and Branch	University	Duration	% / CGPA
MTech, Computer Science and Engineering	Indian Institute of Technology, Madras	2007-2009	8.97/10
BTech, Computer Science and Engineering	TKM College of Engg., Kollam / Kerala University	2003-2007	8.30/10
Higher Secondary Education(XII)	Board of Higher Secondary Examination, Kerala	2001-2003	92.83%

## ACADEMIC PROJECTS

- Active Machine Learning for State Mapping (2008-2009)

Worked on an emerging Machine Learning research area called Active Learning, which is a technique used in Supervised learning algorithms to minimize the cost involved in learning a task. As part of the project, we proposed and implemented an Active learning algorithm to transfer the learning from a Robotic Agent to another, first one being a Robot that was already trained in similar environments, by mapping states in a Transfer learning model.

- Air Conditioner Maintenance and Complaint Tracking Software for IIT Madras.(2007)

Developed a web based application to track the complaints to AC Maintenance Dept.. This was done in PHP-MySQL-Apache platform and was deployed in IIT Madras Intranet.

- Computational Geometry based Path planning and Visibility polygon detection (2006-2007)

Worked on two research problems in Computational Geometry with applications to Robotics. Problems: (1) Finding the shortest path for a point robot in a room with polygonal obstacles. (2) Finding the visibility polygon for a point light source in a room with polygonal obstacles. Developed and implemented two novel algorithms to accomplish the above tasks with promising results.

## RELEVANT COURSES DONE

**Graduate level:** Advanced Data Structures and Algorithms, Topics in Approximation and Randomized Algorithms and Zero Knowledge Protocols, Reinforcement Learning, Data Mining, Advanced Computer Networks, Real-time Computing and Communication, Advanced Computer Architecture, Software Engineering: Theory and Practice, Advanced Mathematical Concepts in Computer Science.

**Undergraduate Level:** Computational Geometry, Algorithm Analysis and Design, Distributed Systems, Cryptography and Network Security, Wireless Networks, High Performance Computer Systems

## ACADEMIC ACHIEVEMENTS

- Outstanding Teaching Assistant award for the year 2009 in IIT Madras.
- All India Rank 101 in GATE 2007 (for CSE) Examination
- TCS Best Student Award during under-graduate studies in TKM CE, Kollam in 2007
- College Topper and University 4th Rank holder for BTech
- School and District level topper for Higher Secondary Examination

## OTHER INTERESTS

- Philosophy, Psychology, Cognitive Sciences
- Music, Photography, Running, Trekking