Suresh Alse

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Links: Github | LinkedIn | Website

Education

Current — MS, Computer Science (Data Science)
University of Southern California, Los Angeles

May 2014 — BTech, Information Technology
National Institute of Technology Karnataka, Surathkal **GPA: 4.0**

Work Experience

Aug '14 - Aug '15 | Software Development Engineer, **Intuit Inc.**
Worked on core development of QuickBooks, an accounting software used by several million users all over the world.

May - July '13 | Summer Intern, **Intuit Inc.**
Worked with QuickBooks android team and developed a code generator that can automatically generate JAVA code for new features based on old features with minimum or no human intervention.

Nov - Dec '12 | Intern, **Bilent.**
Worked on Kyash which is an online payment system which helps people to work in mutually beneficial and trusted environment.

May - July '12 | Summer Intern, **Indibits Web and Business Solutions.**
Worked on an open-source wiki application.

Relavent Projects

- **Social Event Detection using Multimodal clustering** - I discovered event-related miltimodal multimedia and organized them in event-specific clusters. SIFT features were extracted from images to represent them numerically. Then I used a supervisory signal and SVM to perform multimodal clustering. This approach essentially achieves "supervised fusion" of hetrogeneous features and retrieves clusters that are related to social events.
- **Call center data analysis** - This involved analysis of Intuit's crucial call center data to minimize the number of calls made by customers. I extracted noun phrases from the customers' problems and clustered similar problems. I was able to generate patterns that could predict the problems that customers may face in future, thus preventing them from making multiple calls.
- **Columbus, Discovering composite Web Services** - Using features in WSDL, similarities between web services are obtained and they are clustered using k-means. Tags are generated for a web service from neighbors orfrom their WSDL. These tags help in reducing the number of web services considered for service composition for a request. A service dependency graph (SDG) is generated. Composite services are discovered by a search algorithm in SDG which captures the input output dependencies among the services.

Technical Skills

Programming Languages:	C++, Java, Python, Lisp and PHP
Technologies:	Matlab, Octave, ns2, node
Operating Systems:	Windows, Mac and Linux

Publications

- Alse, S, et al, "A State Transition Based Approach to Recognize Gestures Using Multi-Level Color Tracking", 2nd International Conference on Advances in Computing, Communications and Informatics, IEEE International Publishing, 2013, 704-708.
- Alse, S, et al, "A Real Time Multiplayer Gaming Network Platform as a Service", Eighth International Conference on Computer communication networks (ICCN 2014), Elsevier International Publishing, 2014, Ch 19.
- Alse, S, et al, "Automatic Generation of Web Service Composition Templates Using WSDL Descriptions", 2nd International Conference on Information Systems Design and Intelligent Applications, Springer India, 2015, 2194-5357.