Krishna Y. Kamath

CONTACT INFORMATION

Apt. 1504, Casa del Sol,
311, Stasney St., College Station, Texas USA
krishna.kamath@gmail.com
kykamath.github.io

RESEARCH INTERESTS

Data mining in social networks, Large-scale data analytics, Community detection

EDUCATION

Texas A&M University, College Station, Texas USA

Ph.D., Computer Science, Aug 2008 - August 2013 (expected)

- Dissertation: Mining, Modeling, and Analyzing Real-Time Social Trails
- Advisor: Prof. James Caverlee
- GPA 4.0

National Institute of Technology, Rourkela, Rourkela, Orissa India

B.Tech., Computer Science and Engineering, May 2006

- First class with Honors
- GPA 8.80

EXPERIENCE

Google, New York City, USA

Software Engineering Intern **May 2012 to August 2012**

- Worked with the backend team responsible for surfacing high-quality, spam-free reviews on Google+ Local.
- Analyzed Google's local reviews dataset to discover spamming patterns and improved the performance of an automated machine-learning based classifier by adding novel features based on these spamming patterns. This reduced the false-negative rate of spam classification by 30%. Developed and improved existing tools for adding new features to the system, and evaluated the performance of these features.
- Developed an approach using canopy hierarchical clustering algorithm to extract various facets (Ex: service, quality, price) of a location solely based on user reviews.

Department of Computer Science and Engineering, Texas A&M University, College Station, Texas USA

Graduate Research Assistant (PhD Research) **August 2008 to present**

- Developed a suite of efficient algorithms for discovering social trails from large-scale real-time social systems. We view a social trail as an evolving set of potentially short-lived ad-hoc collection of users (and their associated content). The algorithms were designed to meet the challenges associated with social streams, like its large-scale and rapidly changing clusters in the stream.
- Developed techniques for modeling and predicting the spatio-temporal dynamics of social trails. By modeling trail propagations we want to answer questions like, predict where some piece of information is going to be popular and predict how long it is going to stay popular there.

- Developed a framework for social trail-based real-time web analytics. By staying abreast or even ahead of social trails, we developed prognostic analytics tools that can perform real-time content recommendation and form the basis for personalized advertising.

College of Architecture, TAMU, College Station, Texas USA

Student Software Developer **January 2009 to August 2010**

- Developed internal tools for the college websites in Django and PHP (Zend Framework). Maintenance of various department websites and databases.

Cisco Systems, Bangalore, Karnataka USA

Software Engineer **July 2006 to August 2008**

- Developed a Eclipse-based GUI for a network management product. The product was specifically designed for large telecom service providers.
- Developed a set of integrated tools for proactive management of large customer networks. The application was developed using J2EE and Spring framework.

Publications

1. Kyumin Lee, **Krishna Y. Kamath** and James Caverlee. Combating Threats to Collective Attention in Social Media: An Evaluation, 7th International AAAI Conference on Weblogs and Social Media (**ICWSM**) 2013, Boston, USA

2. **Krishna Y. Kamath**, James Caverlee, Kyumin Lee and Zhiyuan Cheng. Spatio-Temporal Dynamics of Online Memes: A Study of Geo-Tagged Tweets, Proceedings of 22nd Annual ACM World Wide Web (WWW) Conference (**WWW**) 2013, Rio de Janeiro, Brazil

3. Yuan Liang, James Caverlee, Zhiyuan Cheng and **Krishna Y. Kamath**. How Big is the Crowd? Event and Location Based Population Modeling in Social Media, Proceedings of the 24th ACM conference on Hypertext and hypermedia (**HT**) 2013, Paris, France

4. **Krishna Y. Kamath**, James Caverlee, Daniel Sui and Zhiyuan Cheng. Spatial Influence vs. Community Influence: Modeling the Global Spread of Social Media, Proceedings of 21st International Conference on Information and Knowledge Management (**CIKM**) 2012, Maui, Hawaii, USA (Acceptance rate: 13.4%)

5. **Krishna Y. Kamath** and James Caverlee. Content-Based Crowd Retrieval on the Real-Time Web, Proceedings of 21st International Conference on Information and Knowledge Management (**CIKM**) 2012, Maui, Hawaii, USA (Acceptance rate: 13.4%)

6. Elham Khabiri, James Caverlee and **Krishna Y. Kamath**. Predicting Semantic Annotations on the Real-Time Web, Proceedings of the 23st ACM conference on Hypertext and hypermedia (**HT**), 2012, Milwaukee, Wisconsin, USA (Acceptance rate: 27.5%)

7. Kyumin Lee, James Caverlee, **Krishna Y. Kamath** and Zhiyuan Cheng. Detecting Collective Attention Spam, Proceedings of WebQuality Worksop at 21st Annual ACM World Wide Web (**WWW**) Conference 2012, Lyon, France.

8. **Krishna Y. Kamath** and James Caverlee. Expert-Driven Topical Classification of Short Message Streams. In proceedings of 3^{rd} IEEE Conference on Social Computing (**SocialCom**) 2011. (Acceptance rate: 9.8%)

9. Zhiyuan Cheng, Kyumin Lee, James Caverlee and **Krishna Y. Kamath**. Toward Traffic-Driven Location Based Web Search. In proceedings of 20^{th} ACM International Conference on Information and Knowledge Management (**CIKM**) 2011. (Acceptance rate: 15%)

10. **Krishna Y. Kamath** and James Caverlee. Transient Crowd Discovery on the Real-Time Social Web. In Proceedings of 4^{th} ACM International Conference on Web Search and Data Mining (**WSDM**) 2011. (Acceptance rate: 22.3%)

11. Said Kashoob, James Caverlee and **Krishna Y. Kamath**. Community-Based Personalized Search of the Social Web. Proceedings of the 21^{st} ACM conference on Hypertext and hypermedia (**HT**) 2010. (Acceptance rate: 34%)

Posters and Demos

1. **Krishna Y. Kamath** Ana-Maria Popescu and James Caverlee. Board Coherence in Pinterest: Non-visual Aspects of a Visual Site. (Poster). In proceedings of 20^{th} Proceedings of 22nd Annual ACM World Wide Web (**WWW**) Conference 2013, Rio de Janeiro, Brazil.

2. **Krishna Y. Kamath** and James Caverlee. Discovering Trending Phrases on Information Streams (Poster). In proceedings of 20^{th} ACM International Conference on Information and Knowledge Management (**CIKM**) 2011.

3. James Caverlee, Zhiyuan Cheng, Brian Eoff, Chiao-Fang Hsu, **Krishna Y. Kamath**, and Jeff McGee. CrowdTracker: Enabling Community-Based Real-Time Web Monitoring (Demo). Proceedings of 34th Annual ACM SIG Information Retrieval (**SIGIR**) Conference 2011, Beijing, China 2011.

4. **Krishna Y. Kamath** and James Caverlee. Identifying Hotspots on the Real-Time Web (Poster). Proceedings of the 19^{th} ACM International Conference on Information and Knowledge Management (**CIKM**) 2010.

Recognitions

Wisenbaker Fellowship **2009 - 10**

- Awarded the Royce E. Wisenbaker 39 Graduate Fellowship for Academic Year 2009 -2010.

Patents

1. Taxonomy Based Multiple Ant Colony Optimization (TaMACO) for Routing in Mobile Ad-hoc Networks. US7760718. (Issued 2010).

Technical Skills

Programming: Python, Java, PHP, C++, Javascript, HTML
Data Analysis: Hadoop (with MrJob), Scipy Stats, R, Matplotlib