

Work Experience

Senior Software Development Engineer

Microsoft. January 2011 – present

Member of Early Stage Product Group within Bing Search. Duties include creating, prototyping and developing new features and concepts for Bing Search with a focus on Personalization, Social and Strategy. Multiple features are currently in the Bing development cycle. Created a toolkit for rapid iterative prototyping of both front-end and back-end features on the Bing SERP.

Research Engineer

Yahoo! Integrated Consumer Experiences. June 2009 – December 2010

Built prototypes and technologies for the Integrated Consumer Experiences Ideation team to develop new user experiences for Yahoo! users on both web and mobile. Multiple prototypes and concepts were shipped and entered the production roadmap. Performed a consulting role for various product groups that needed specific expertise to solve problems and determine project feasibility.

Research Engineer

Yahoo! Connected Life. May 2008 – May 2009

Member of the Early Stage Product group working on strategy, IP, prototypes and platforms to inform the direction of mobile products within Yahoo! Designed and wrote the cell-tower positioning platform used by the Yahoo! Go 3.0 mobile application.

Research Engineer

Yahoo! Research Berkeley, Berkeley, California. June 2005 – May 2008

Worked on media analysis and developing new methods to infer the content and context surrounding collected media. Public projects include ZoneTag, TagMaps, Zurfer and FireEagle.

Visiting Researcher

Garage Cinema Research, University of California at Berkeley, April 2005 – May 2005

Worked with Prof. Marc Davis on conducting research into collecting metadata information from camera phone users. Responsibilities included technical feasibility studies, Symbian programming, UI design, user testing, data mining, etc...

Education

M.S. - Human Computer Interaction, Georgia Institute of Technology

Atlanta, Georgia, May 2004.

B.E. (Computer Science & Engineering), University of Madras

Chennai, India, April 2002.

Selected Projects

- Created an internal prototyping toolkit for the rapid iterative prototyping of both front-end and back-end features on the Bing SERP. Awarded the Thought Leadership award at the Microsoft Garage Science Fair for this project which has been used for multiple shipping projects within Bing.
- Developed several internal prototype applications using both HTML5 and the Nokia Widget Runtime (HTML/Javascript/CSS). Two examples were highlighted in the 2009 IAB MIXX Keynote presentation.
- Designed, developed and deployed the cell tower positioning and location platform used by the Yahoo! Go application. Project was completed in 3 weeks and was used unchanged for over 2 years till the product was discontinued.
- Designed and built <http://www.famousfood.us/> An HTML5/CSS/Javascript mobile web application to find and map famous restaurants near a user.
- Developed the tag extraction algorithm and serving mechanism used in the TagMaps [World Explorer](#) system that extracts meaningful geo-labels from unstructured Flickr photographs. Also developed a high speed data API for both internal and external use.
- Designed and built the location sensing and social tag suggestion back end of the ZoneTag context aware photo uploader. Public API's were also released.
- Designed and built the server backend for Zurfer, a context aware photo browser. Services were designed to add a location layer over existing Flickr API's and to optimize phone communication.

Skill Set

- PHP, MYSQL. Knowledge of Javascript, CSS, HTML 5 and Visual Basic.
- Specialized in strategic ideation and prototyping to determine viability of concepts and technologies.
- Experienced in designing, building and maintaining API interfaces to a variety of backend systems.
- Several years of experience in working with context aware technologies with an emphasis on location aware systems.
- Experienced with iterative design and rapid prototyping techniques using wireframes and paper prototypes as well as multi-fidelity computer prototypes.
- 7+ years of work and academic experience in design, testing and evaluation of software interfaces with an emphasis on usability. Methodologies used include requirements analysis, task analysis, persona creation, storyboarding and heuristic analysis.
- Significant experience with designing and conducting user studies and usability tests utilizing techniques such as ethnography, think alouds, experience sampling, contextual inquiry, surveys, questionnaires and interviews.

Patents

13 issued and 20+ pending patents

Publications

- Naaman, M. and Nair, R. ZoneTag Tag Suggestions: What is this person doing on my phone? *IEEE Multimedia*, vol. 15, no. 3, pp. 34-40, July-Sept. 2008
- Naaman, M., Nair, R. and Kaplun, V. Photos on the Go: A Mobile Application Case Study. In *Proceedings of CHI 2008*, ACM, New York, NY, 1739-1748.
- L. Kennedy, M. Naaman, S. Ahern, R. Nair, T. Rattenbury. How Flickr Helps us Make Sense of the World: Context and Content in Community-Contributed Media Collections. In *Proceedings of Multimedia 2007*. ACM, New York, NY, 631-640.
- Hwang, A., Ahern, S., King, S., Naaman, M., Nair, R., and Yang, J. 2007. Zurfer: mobile multimedia access in spatial, social and topical context. In *Proceedings of Multimedia 2007*. ACM, New York, NY, 557-560.
- Ahern, S., Naaman, M., Nair, R. and Yang, J. World Explorer: Visualizing Aggregate Data from Unstructured Text in Geo-Referenced Collections. In *Proceedings JCDL 2007*. ACM Press (2007). 1-10.
- Ahern, S., King, S., Naaman, M. and Nair, R. Summarization of Online Image Collections via Implicit Feedback (Poster). In *Proceedings of WWW 2007*. ACM, New York, NY, 1325-1326.
- Ahern, S., Eckles, E., Good, N., King, S., Naaman, M. and Nair, R. Over-Exposed? Privacy Patterns and Considerations in Online and Mobile Photo Sharing. In *Proceedings of CHI 2007*. ACM, New York, NY, 357-366.
- Ahern, S., Davis, M., King, S., Naaman, M. and Nair, R. Reliable, User-Contributed GSM Cell-Tower Positioning Using Context-Aware Photos. (Poster) In *Poster Session at the Eighth International Conference on Ubiquitous Computing (UbiComp 2006; Orange County, USA)*.
- Ahern, S., Good, N., King, S., Naaman, M. and Nair, R. Privacy Decisions for Location-Tagged Media (Poster). In *Poster Session at the Eighth International Conference on Ubiquitous Computing (UbiComp 2006; Orange County, USA)*.
- Nair, R., Reid, N. and Davis M. (2005) Photo LOI: Browsing Multi-User Photo Collections (Technical Demonstration). In: *Proceedings of 13th Annual ACM International Conference on Multimedia (MM 2005; Singapore)*. ACM Press (2005). 223-224.
- Davis et.al. (2005) MMM2: Mobile Media Metadata for Media Sharing" (Video). In: *Proceedings of Multimedia 2005*. ACM Press (2005). 267-268.
- Nair, R. and Davis, M. "Bluetooth Pooling to Enrich Co-Presence Information". In *Proceedings of the Poster Session at the Seventh International Conference on Ubiquitous Computing (UbiComp 2005; Tokyo, Japan)*.
- Nair, R., Vaida, S. and Mynatt, E.D. "Frequency-based detection of task switches". In *Proceedings of the 19th British HCI Group Annual Conference (HCI 2005; Edinburgh, Scotland)*. Springer-Verlag (2005), Vol 2. 94-99.
- Nair, R. "Calculation of an Aggregated Level of Interest Function for Recorded Events." In *Proc. of ACM Multimedia 2004, ACM Press (2004)*, 272-275.
- Nair, R., Shiroor, K. and Godfrey, J. "BuzzTrans: Evaluation of a Translating Instant Messenger Client". In *Proceedings of IHCI 2004*.