



## HP Labs Experience Zone Demonstrations

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### **HP BookPrep**

HP Labs Palo Alto

Presented by: Steven Rosenberg, program manager; Jian Fan, research engineer; Prakash Reddy, BookPrep system architect; Andrew Bolwell, director, HP Corporate Ventures

BookPrep is an Internet-based platform that enables on-demand printing of books. Based on imaging and printing technology from HP Labs, it automatically aligns and flattens the scanned texts of books, cleaning and brightening the crease and page corners for consistent coloration. The result is a high-quality and print-ready PDF. Going well beyond just digitally scanning books, BookPrep significantly improves the digital publishing workflow and reduces the high up-front investment of formatting virtual book assets, ensuring that works can be available for online and print-on-demand distribution.

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### **Conversa**

Multimedia Communications & Networking Lab, HP Labs Palo Alto

Presented by: April Slayden Mitchell, research engineer; Alex Vorbau, research engineer; Mitch Trott, research engineer  
Lab Director: John Apostolopoulos

Conversa is a mobile video conversation system that operates like an online discussion group – but in video form. Traditional online social groups allow users to only speak with the group via text, while Conversa enables users to communicate in the same type of forum, but in video. Conversa users can utilize either a 3G phone or the web site to browse conversations and provide responses. The Conversa web site has all of the features users expect, such as RSS video podcast support, video playback in the browser and an open HTTP API to support creative developers.

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## **CloudView**

Social Computing Lab, HP Labs Palo Alto

Presented by: Fang Wu, research scientist

Lab Director: Bernardo Huberman

CloudView is a web-based service that offers new ways to configure and display information on handheld devices. Users can view real-time information, such as flight status, stock quotes, weather or sports scores on their mobile device without having to open a mobile browser. In the enterprise, CloudView could be used by employees to track inventory or sales data on their mobile.

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## **BRAIN (Behaviorally Robust Aggregation of Information in Networks)**

Social Computing Lab, HP Labs Palo Alto

Presented by: Leslie Fine, research scientist

Lab Director: Bernardo Huberman

BRAIN is a powerful web-based tool that uses proprietary algorithms to tap into the collective wisdom of employees. BRAIN was developed to tackle a problem that troubles the corporate world – how to extract accurate information about future events, such as predicted quarterly revenues or expected demand for a product, from small teams of knowledgeable workers. BRAIN removes the bias and hierarchy from the forecasting process and drives participants to make more thoughtful and independent predictions. The result: BRAIN enables a pool of 10-15 people to create predictions in a highly repeatable and efficient way.

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## **WaterCooler**

Social Computing Lab, HP Labs Palo Alto

Presented by: Mike Brzozowski, research scientist

Lab Director: Bernardo Huberman

WaterCooler is a web-based service that allows enterprises to tap their greatest asset – the distributed knowledge base of its employees – and helps employees find people with specific expertise or interests. By aggregating streams of a company's blogs, forums, knowledge briefs and other sources acquired using industry-standard RSS feeds, WaterCooler makes employees' shared knowledge findable, and fosters lively discussion across an organization.

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## **CloudPrint**

Social Computing Lab, HP Labs Palo Alto

Presented by: Scott Golder, Research Engineer



Lab Director: Bernardo Huberman

CloudPrint is a free, web-based service offered by HP Labs that makes it possible to share, store and print documents, photos and web pages using a mobile phone. The service works in two ways: mobile users can send email attachments, data or Web pages from a mobile device to the CloudPrint virtual print server for later printing, or online users can print documents stored on the CloudPrint virtual server wherever they are while traveling.

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## **Document Authentication System**

Innovations for the Next Billion Customers, HP Labs India

Presented by: Anji Kuchibhotla, department director

Lab Director: Ajay Gupta

Document Authentication System (DAS) is a secure two dimensional (2D) barcode system designed to provide the same degree of security for paper documents as is available in the electronic world.

Fraud and forgery of paper documents is a major concern for government and enterprises around the world and the problem is especially acute in India, which depends heavily on paper documentation. DAS was conceived by researchers in HP Labs India to help local companies, as well as HP's global customers, address this issue.

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## **Gesture-based Computing Interfaces**

Innovations for the Next Billion Customers, HP Labs India

Presented by: Sriganesh Madhvanath, senior research scientist

Lab Director: Ajay Gupta

HP Labs India is working on better user experiences with touch and pen gestures, which are becoming ubiquitous on personal devices, such as the TouchSmart PC, touchpads on notebooks and Smartphone touchscreens. An outgrowth of HP Labs India's development of a gesture-driven keyboard that is easier to use with languages that are not alphabet-based, the gesture research is exploring generic features and classification algorithms for recognizing gestures and characters. Projects include, FreePad, Gesture-based Command and Control, Gesture-based Navigation and Doodle Authentication.

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## **FaceBubble**

Multimedia Interaction & Understanding Lab, HP Labs Palo Alto

Presented by: Daniel Tretter, research manager

Lab Director: Qian Lin

The rise of digital photography has created an explosion of stored digital photos. FaceBubble offers an easier way for people to organize their rapidly expanding



collection of digitized visual content. FaceBubble utilizes a photo clustering system that combines face models and photo clustering methods to achieve automatic and accurate face identification in images. Consumers input into the tool a photo and name for each individual they want recognized. After analyzing and storing information about the face, FaceBubble can then find other photos of the person in the image collection.

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## **Snapfish Lab**

Multimedia Interaction & Understanding Lab, HP Labs Palo Alto

Presented by: Jerry Liu, R&D project manager; Eamonn O'Brien-Strain, senior system architect; Brian Atkins, senior research scientist; Peng Wu, senior research scientist  
Lab Director: Qian Lin

Snapfish Lab is a website that offers early access to multimedia research under development at HP Labs. Snapfish Lab houses experimental media processing tools to enhance individual photos, browse photo collections, and create new media content with existing photos. Anyone with a Snapfish account can try out the tools using their own photographs. As the tools are still under development, the site provides a way for HP to evaluate these technologies and incorporate customer feedback into the research process.

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## **Pluribus**

Multimedia Interaction & Understanding Lab, HP Labs Palo Alto

Presented by: Niranjana Damera-Venkata, research engineer; Nelson L. Chang, research engineer  
Lab Director: Qian Lin

Pluribus combines the power of multiple inexpensive, commercially-available projectors to quickly and automatically create a scalable "super-projector." These combined projectors provide such capabilities as high resolution, strong brightness, deep contrast, high frame rate and wide-color range. Pluribus could potentially impact a range of display markets, such as gaming, digital cinema, event projection, collaboration and visualization.

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## **HP Indigo Photo Enhancement Server**

Printing Automation Technology Lab, HP Labs Israel

Presented by: Renato Keshet, project manager  
Lab Director: Oren Ariel

The HP Indigo Photo Enhancement Server is an automated software tool, designed specifically for the photo specialty market. It helps photofinishers and print service providers produce higher-quality digital photographs on their HP Indigo presses. The HP Indigo Photo Enhancement Server uses 12 proprietary algorithms to automatically detect faults and improve image quality. It has the ability to sharpen and smooth images, adjust contrast and brightness, enhance shadow details, minimize JPEG artifacts and reduce



red-eye.

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## **MyPaasPort**

Web Services & Systems Lab, HP Labs Bristol

Presented by: Roger Gimson, research manager

Lab Director: Tony Wiley

MyPaasPort is a web-based beta service that allows users to easily produce high-quality documents that can be customized for each individual recipient. By combining automated document layout with customizable web-based user interfaces, MyPaasPort enables small businesses, franchises, and local branches of large organizations to easily adapt standardized documents to the needs of their business and customers.

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## **Trusted Converged Client**

Systems Security Lab, HP Labs Bristol

Presented by: Richard Brown, department manager

Lab Director: Martin Sadler

The Trusted Converged Client (TCC) eliminates the need to maintain strict physical separation of the personal and business worlds by using separate devices. The TCC uses virtualization technology to isolate personal and business information within a single PC by creating different compartments. As a result, a business PC can be used for both personal and business needs without exposing corporate networks and information to the risks associated with the open Internet.

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