# iPrivacy: Automatic Recommendation of Personalized Privacy Settings for Image Sharing

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# **Challenges:**

- Efficiently identify privacy sensitive objects in the large amount of images shared.
- Automatically recommend policies that harmonize the privacy concerns of multiple human subjects in the same image.



#### Recommended New imag Policy P Multi-Party Privacy **Images** Harmonizer **System** Hierarchical Privacy **Overview** Tendency **Image** Modeling Classification **1** Candidate *Image* policies S<sub>n</sub> category **Hierarchical** User Policy **Policies** Mining

User

#### **Solutions:**

- Large-scale deep learning on images and privacy policies
- Multiple-party privacy negotiation
- Seamlessly integrate expertise from two different domains: image understanding and privacy management

### **Broader Impacts:**

- Address these rising privacy concerns of photo sharing in social sites and benefit billions of social network users.
- A range of educational activities: curriculum development, professional training for students, and cybersecurity camp for K-12 teachers, with emphasis to under-represented groups.

## **Scientific Impacts:**

- Automate the privacy configuration process by diving into image content analysis and users privacy preference evolution.
- Provide better understanding of collaborative privacy protection in the social society.