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Assignment 1 Report

**Datasets**

The *CV Datasets on the web* link contains a huge list of useful computer vision datasets, with categories like Detection, Classification, Recognition, and Medical. All of these contain more links to collections of images that can be used for image recognition depending on what you are trying to accomplish. The *ComputerVisionOnline Dataset* contains a similar collection of image sets with previews to each one. This site also allows you to search for particular keywords that you are looking for to narrow the results. The *visionbib* link provides different information from the previous two; in addition to online datasets, we are given access to a repository of scholarly articles. These articles cover a large range of topics in computer vision including algorithms and methodology.

**Researchers**

*Horst Bischof* is the Vice Rector for Research at Graz University of Technology and a General Chair of CVPR 2015 in Boston. He has published more than 630 scientific papers on his research in object recognition, biometrics, visual learning, and more. *Terrance E. Boult* is the Chair of Innovation and Security at the University of Colorado Colorado Springs. He runs the Vision and Security Technology Lab overseeing projects in surveillance, sensor networks, and distributed steganalysis. He also works with The El Pomar Institute for Innovation and Commercialization to help companies use computer vision technology in their products. *Marc’Aurelio Ranzato* graduated with a doctorate in Computer Science from the New York University and is currently a researcher at the Facebook AI Research Lab. He has developed unsupervised learning algorithms based on different models and applied them to a variety of applications including object and speech recognition.

**Frameworks**

*OpenCV* is a free and open-source library for computer vision. It is compatible with a wide range of programming languages and is designed with speed in mind making it ideal for on-the-fly image recognition and other computer vision applications. *ccv: A Modern Computer Vision Library* takes us to the Github for the C-based vision library. This library is compatible with most operating systems and is able to cut out unnecessary preprocessing during computer vision tasks, speeding them up considerably.

**Related Links**

The *Resources for students* link by Frédo Durand of MIT provides a number of useful links to student, mainly concerning the writing of scholarly articles. The links give insight into effectively writing articles and performing research within the discourse community of computer vision. *The Computer Vision Industry* by David Lowe lists computer vision products by category with links to the companies that produce them. Some of the categories available are Eye and Head Tracking, Gesture Recognition, and Security and Biometrics.