

CloudCV: Large Scale Distributed Computer Vision as a Cloud Service



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Motivation: BigData

- **Motivation:** Images/Videos - fastest growing content on the Internet
- **Need to scale:** utilizing heterogeneous platforms: multi-core machines, distributed clusters, GPUs
- **Problem:** Everyone repeatedly solving same parallel design challenges
- **Solution:** Computer Vision APIs on the cloud

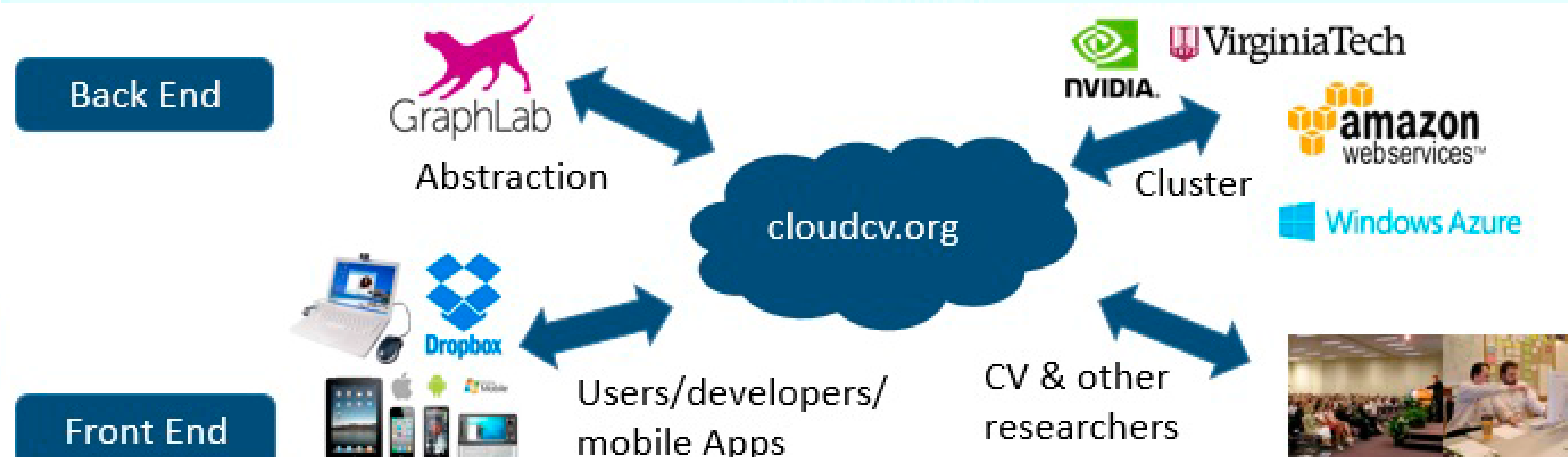
Sponsors



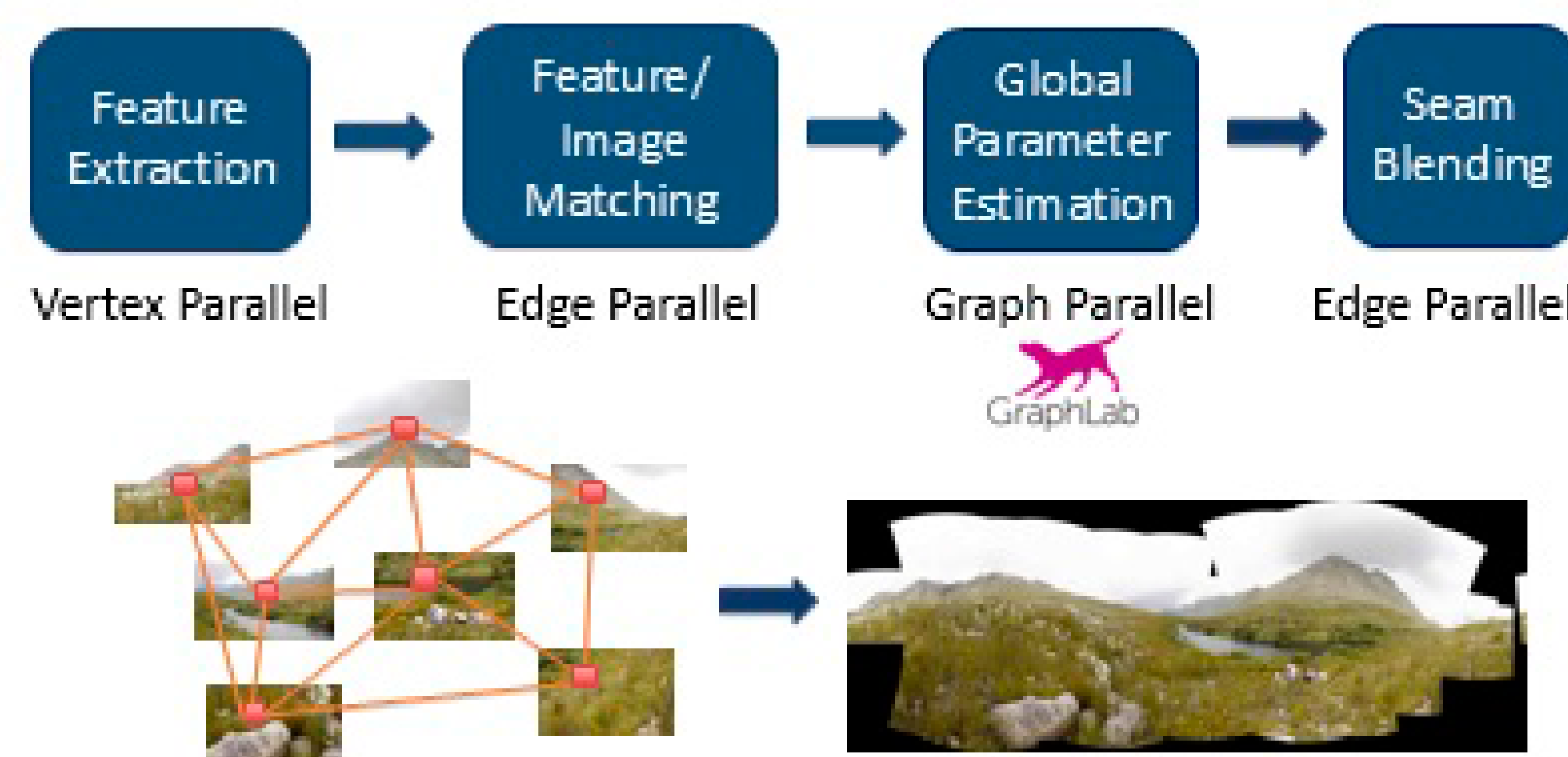
Features

- ☐ **Downloads available on cloudcv.org:**
 - 16 Features including DeCAF features for 1.2 million ImageNet images; 400 GB, **1.9 years** of CPU time.
 - Pre-trained DPM models for all the 200 classes of the ILSVRC 2013 detection dataset
- ☐ **API:** Object detection using DPM models
- ☐ **Upcoming:** RCNN models trained on ImageNet; EC2, Azure integration

Framework



Distributed Image stitching



API Example: Image Classification

