

Cloud Computing and its Relevance to Distance Learning

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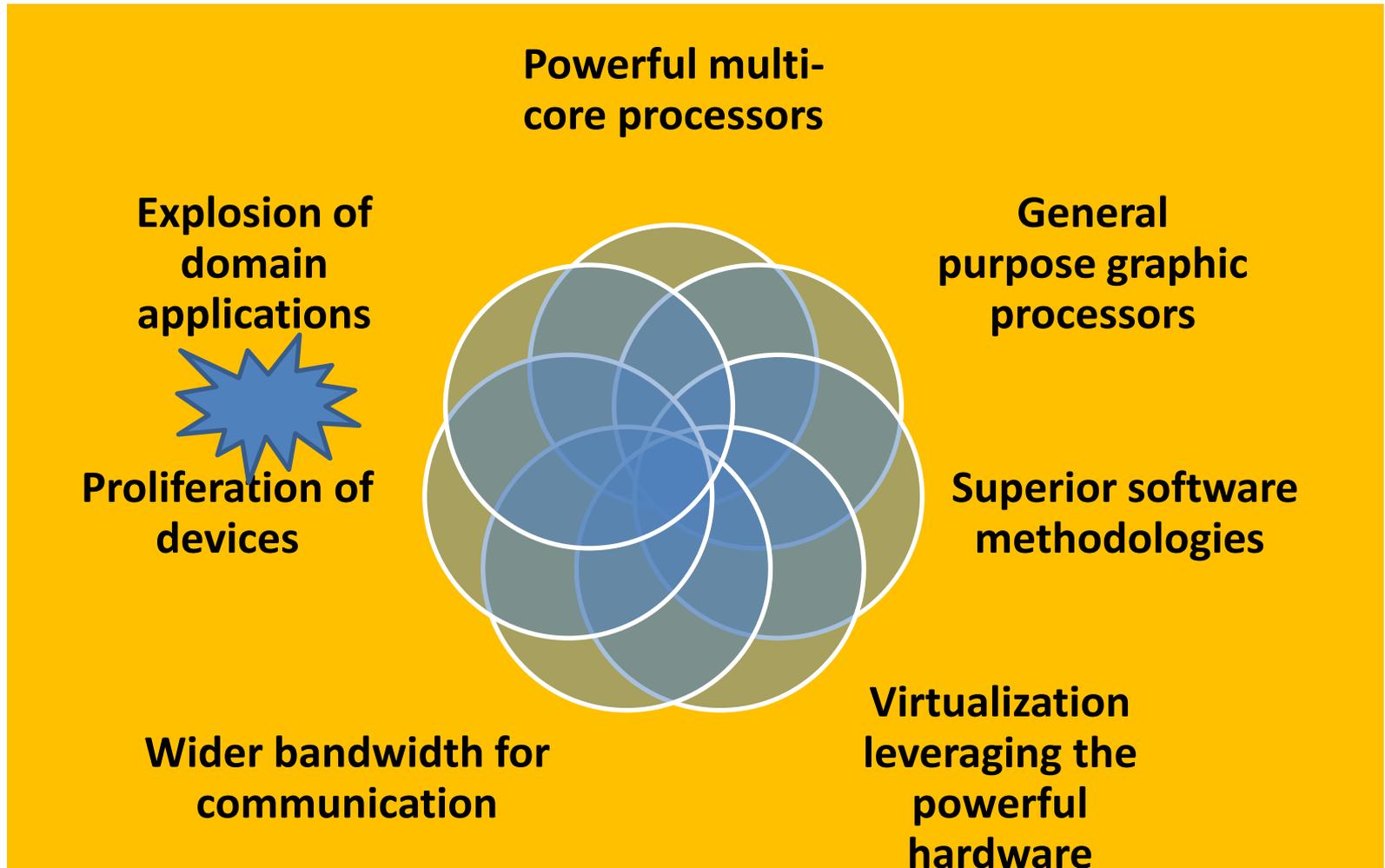
Jessica Poulin

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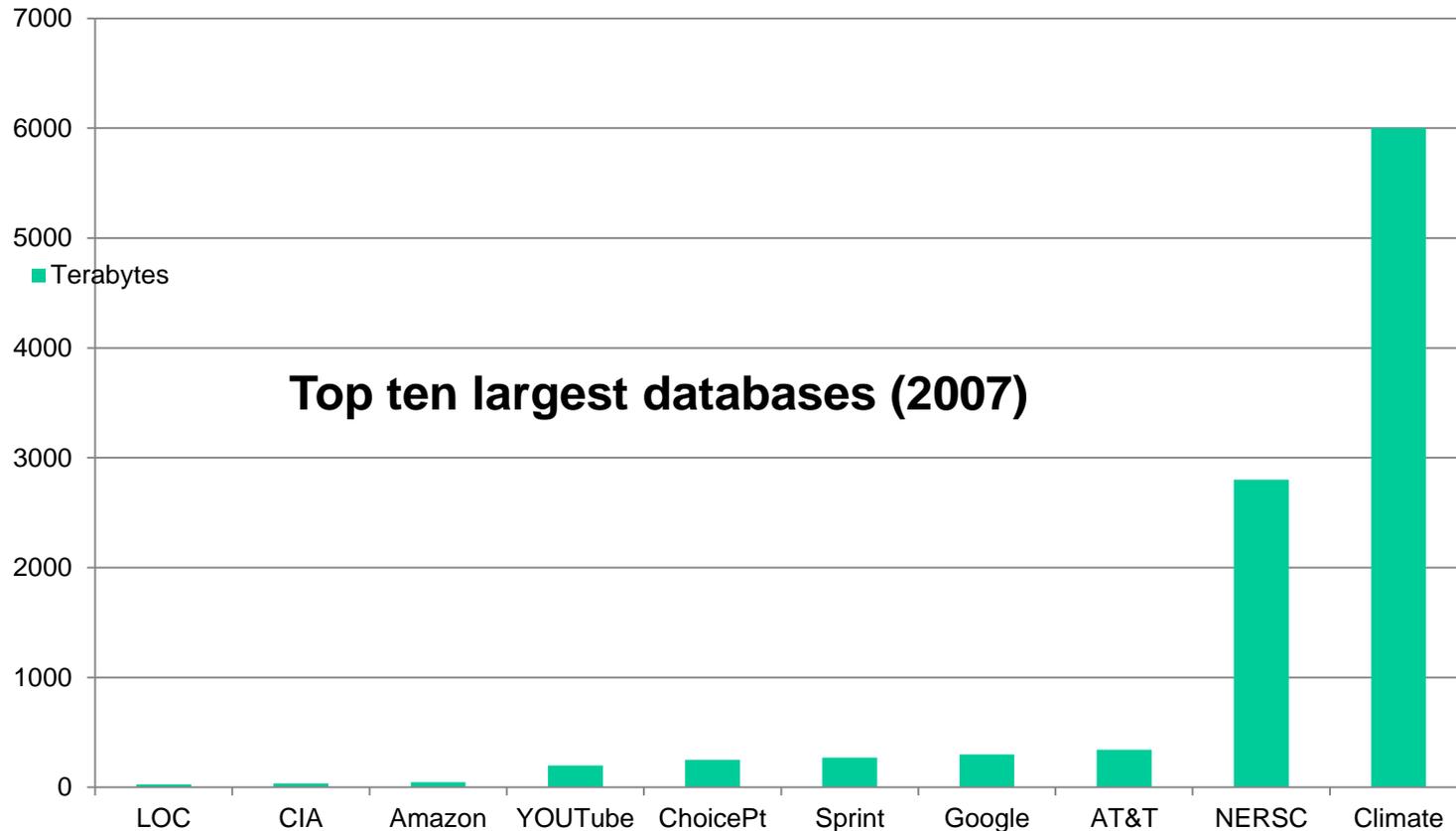
What is cloud Computing?

- How is it different from web-based application or mobile application?
- Is it here to stay?
- Big data and cloud relationship?
- How DO students learn on the cloud?
- BIO & CSE collaboration
- Latest URL:
<http://popfrontpage.appspot.com/>

Introduction: A Golden Era in Computing

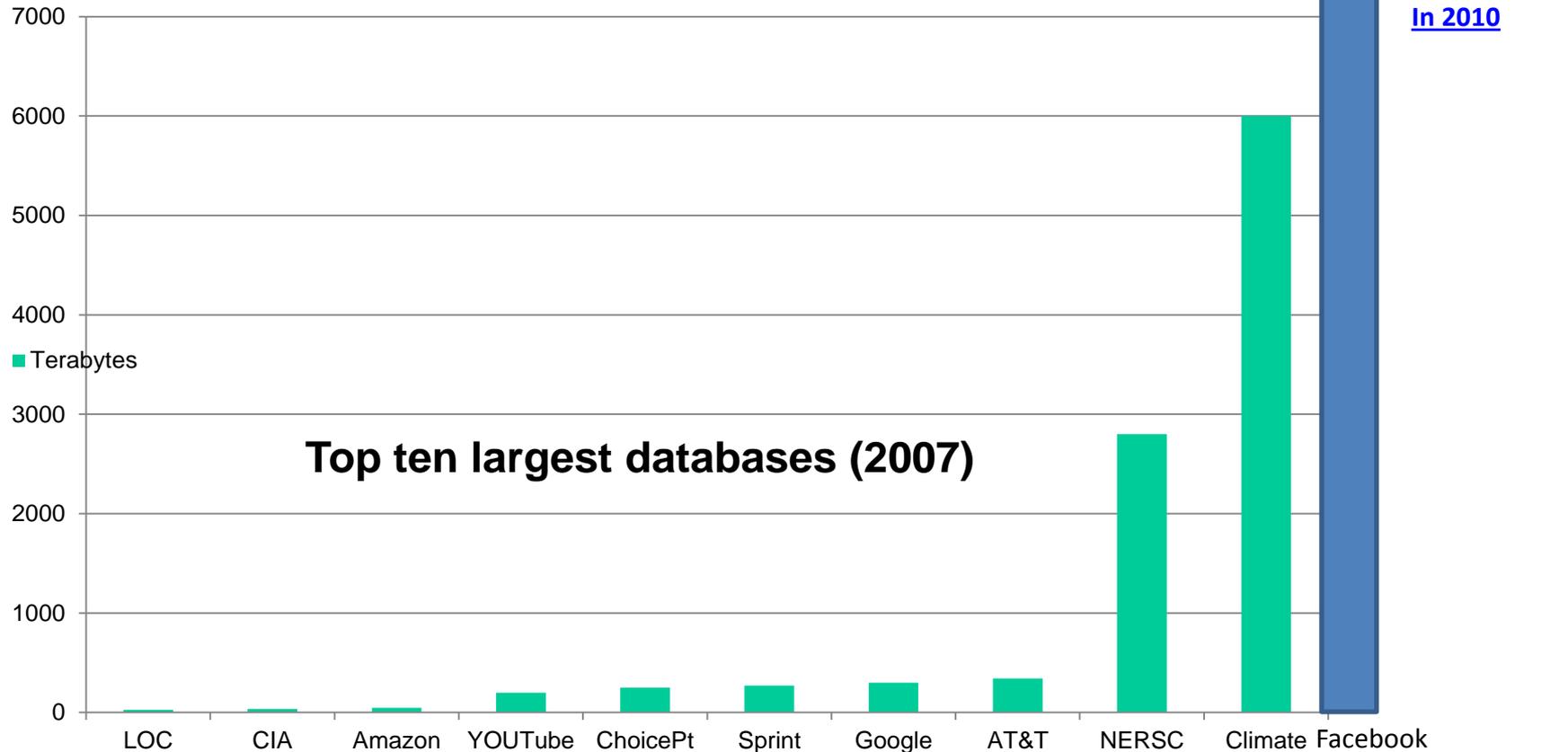


Top Ten Largest Databases



Ref: <http://www.focus.com/fyi/operations/10-largest-databases-in-the-world/>

Top Ten Largest Databases in 2007 vs Facebook 's cluster in 2010



Ref: <http://www.focus.com/fyi/operations/10-largest-databases-in-the-world/>

Basic Migration Drift NR-Mating Mutation Selection M+S

Graph

Full Screen

Migration

Population: Frequency of A_1 allele (Red): Frequency of A_1^* in Migrants: Fraction of Migrants(M): Dominance: Step n generations forward:

Next

Clear

Result

 129 $f(A_1)$: 0.406 $N(A_1A_1)$: 33

 71 $f(A_2)$: 0.594 $N(A_1A_2)$: 96
Current generation: 15 $N(A_2A_2)$: 71

Check for Hardy-Weinberg



Google App Engine Load Monitoring on 10/11/2010

Dashboard - Evolutionary Biology App - Mozilla Firefox
 File Edit View History Bookmarks Tools Help
 google.com https://appengine.google.com/dashboard?app_id=popworld10
 Most Visited Getting Started Latest Headlines
 Google App Engine - Google Code Dashboard - Evolutionary Biology ...
 binakumar82@gmail.com | My Account | Help | Sign out
 popworld10 1 < My Applications

Main
[Dashboard](#)
[Quota Details](#)
[Logs](#)
[Cron Jobs](#)
[Task Queues](#)
[Blacklist](#)

Data
[Datastore Indexes](#)
[Datastore Viewer](#)
[Datastore Statistics](#)
[Blob Viewer](#)

Administration
[Application Settings](#)
[Permissions](#)
[Versions](#)
[Admin Logs](#)

Billing
[Billing Settings](#)
[Billing History](#)

Resources
[Documentation](#)
[FAQ](#)

Charts
 Requests/Second
 6 hrs 12 hrs 24 hrs 2 days 4 days 7 days 14 days 30 days

Billing Status: Enabled (Daily budget: \$2.00) - [Settings](#) Quotas reset every 24 hours. Next reset: 5 hrs

Resource	Usage	Cost / Budget
CPU Time	\$0.10/CPU hour 0% 0.00 of 18.50 CPU hours	\$0.00 / \$1.20
Outgoing Bandwidth	\$0.12/GByte 53% 1.95 of 3.67 GBytes	\$0.12 / \$0.32
Incoming Bandwidth	\$0.10/GByte 0% 0.00 of 1.80 GBytes	\$0.00 / \$0.08
Total Stored Data	\$0.005/GByte-day 0% 0.00 of 81.00 GBytes	\$0.00 / \$0.40
Recipients Emailed	\$0.0001/Email 0% 0 of 2,000	\$0.00 / \$0.00

↑ = Free quota Estimated cost for the last 19 hours: **\$0.12 / \$2.00**

Current Load

URI	Requests last 1 hr	Avg CPU (API) last hr	% CPU last 19 hrs
/favicon.ico	536	0 (0)	0%
/templates/main.html	287	0 (0)	0%
/js/swfobject.js	29	0 (0)	0%

Errors

URI	Count	% Errors last 19 hrs
/favicon.ico	536	100%
/templates/main.html	258	90%

https://appengine.google.com/ 9:58 PM 10/11/2010