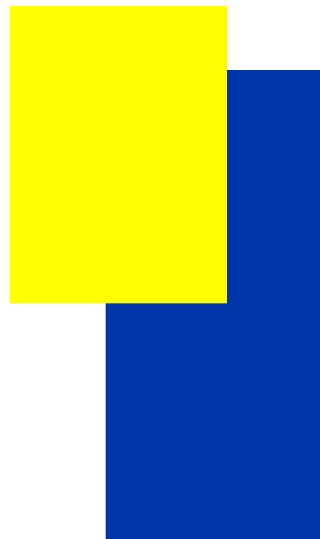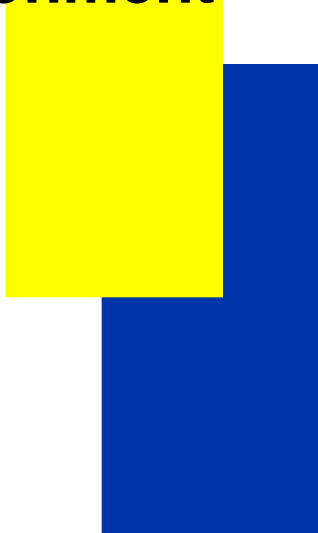# Hispanics in the Academic Environment in the US

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Abstract

- **There has been much interest in the recent years regarding Hispanic Academic Acheivement in the US. In my presentation, I will give a brief background on the different US Goverment reports regarding the condition of Hispanics in the US Educational system, the trend for the growth of the Hispanic population, and the astonishingly low number of Hispanics in Sciences, Math, Computing and Engineering. This presentation is intended mostly to inform participants of the existing academic environment for Hispanics in the US.**

Hispanics in US

- **Population in the US**
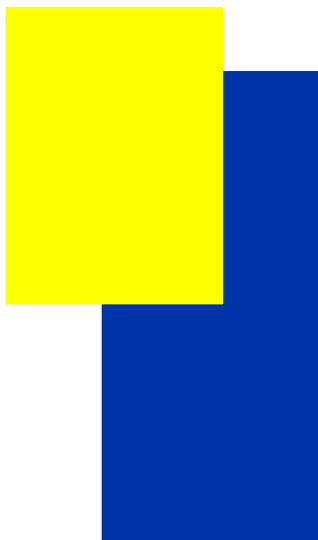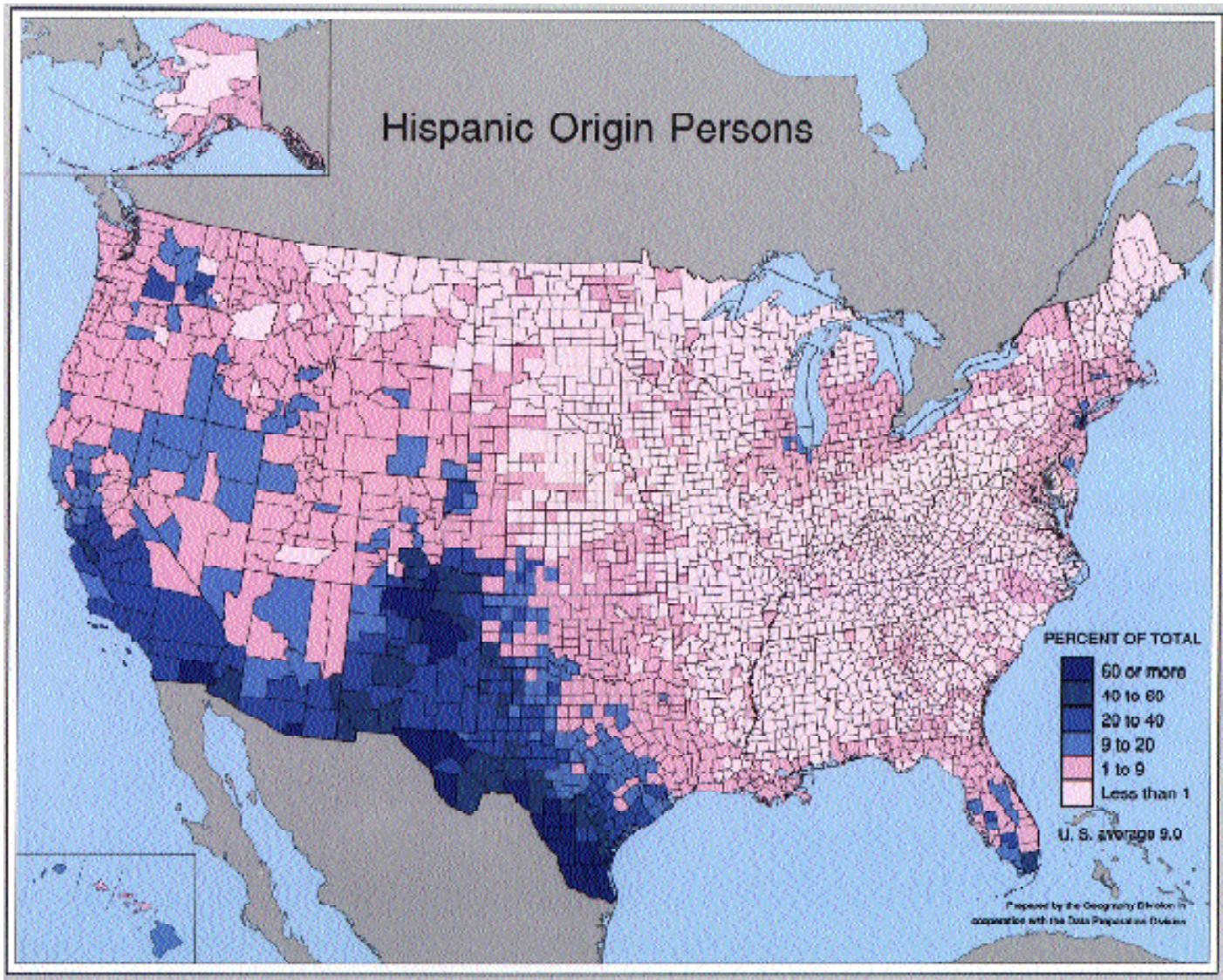 - By 2050, it is expected that 25% of US population will be Hispanics
- **School-age population**
  - By the year 2025, Hispanic children will make up 25% of the school-age population.
  - In California, Texas, Florida, New York already reached that level
- **What makes Hispanics unique**
  - Multinational, multicultural, and multiracial
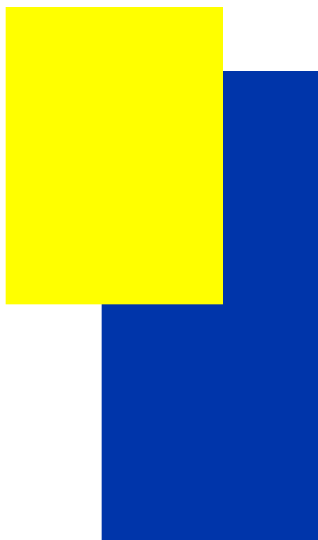
Distribution of Hispanics in US

Hispanic Origin Persons

PERCENT OF TOTAL
- 60 or more
- 40 to 60
- 20 to 40
- 9 to 20
- 1 to 9
- Less than 1

U. S. average 9.0

Prepared by the Geography Division in cooperation with the Data Preparation Division
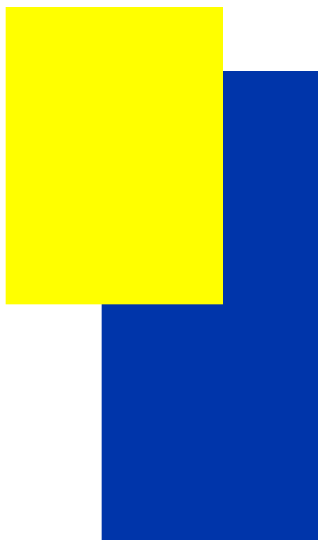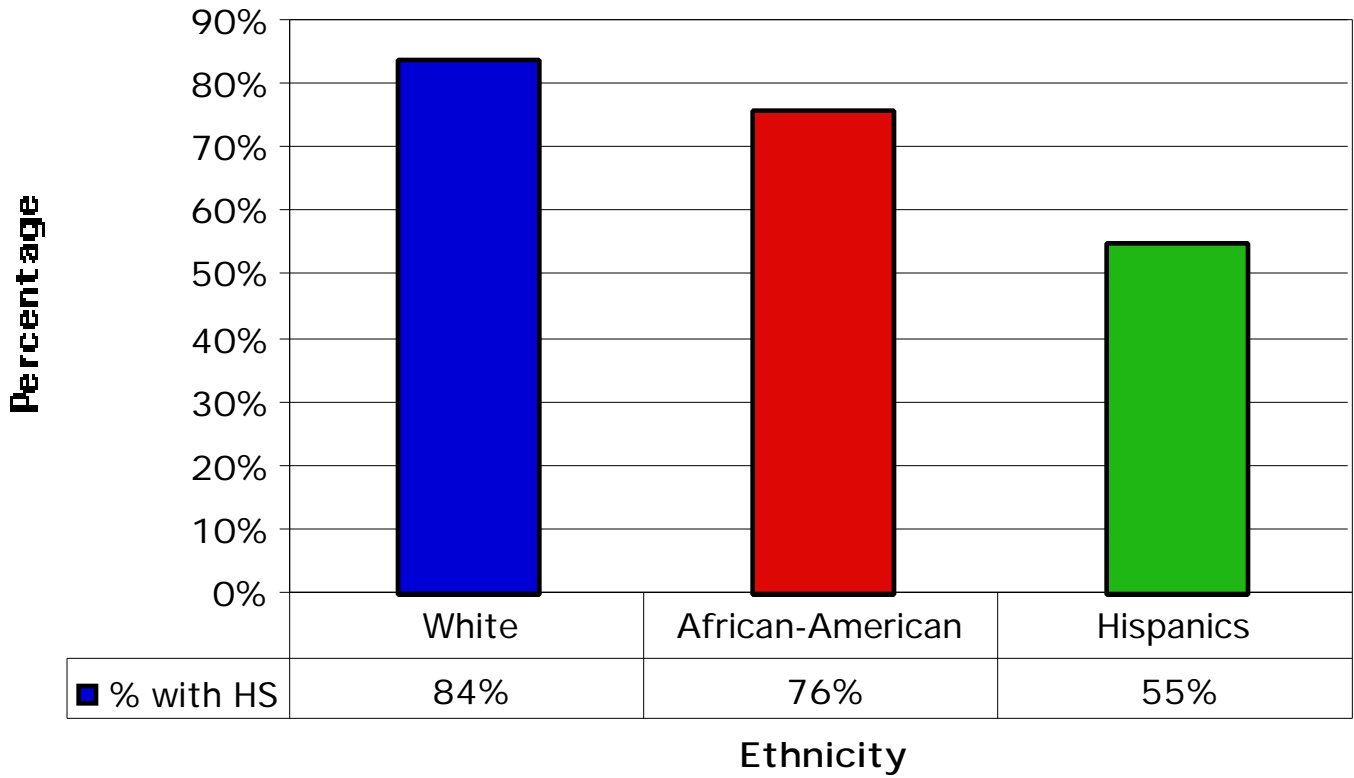
Social characteristics

- **Spanish is predominant language**
  - Usually first language spoken at home
  - Presents challenges for early education
- **Cultural characteristics different from US**
  - Hofstede classifications put people of Hispanic origins from most Hispanic countries at very different levels than the US
- **US Industry is strongly trying to change its workforce to reflect the society**
  - 15%-25% Hispanics
  - Hispanics are highly coveted by some companies

G. Hofstede "Software of the Mind"

High School Completion Rate

25 yrs and Older Completing High School

Ethnicity	White	African-American	Hispanics
% with HS	84%	76%	55%

Hispanic-Serving Institutions

- **What are HSI?**
  - Hispanic-Serving Institutions are accredited and degree-granting public and private nonprofit institutions of higher education with at least 25 percent total undergraduate Hispanic full-time equivalent student enrollment.
- **Where are they?**
  - 203 Academic Institutions classified as HSI are in Arizona, California, Texas, Puerto Rico, Florida, Colorado, Kansas, Massachussets, Illinois, New Jersey, New Mexico, New York, Washington
  - 67% are in three locations: California (57), Puerto Rico (47) and Texas (32).

Hispanic-Serving Institutions
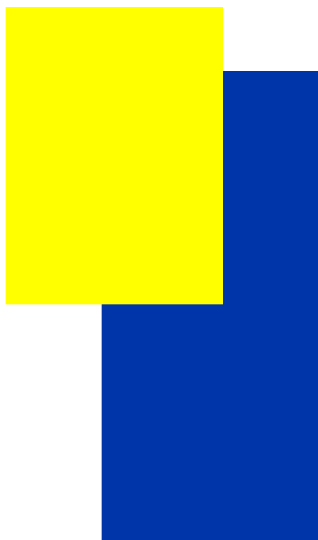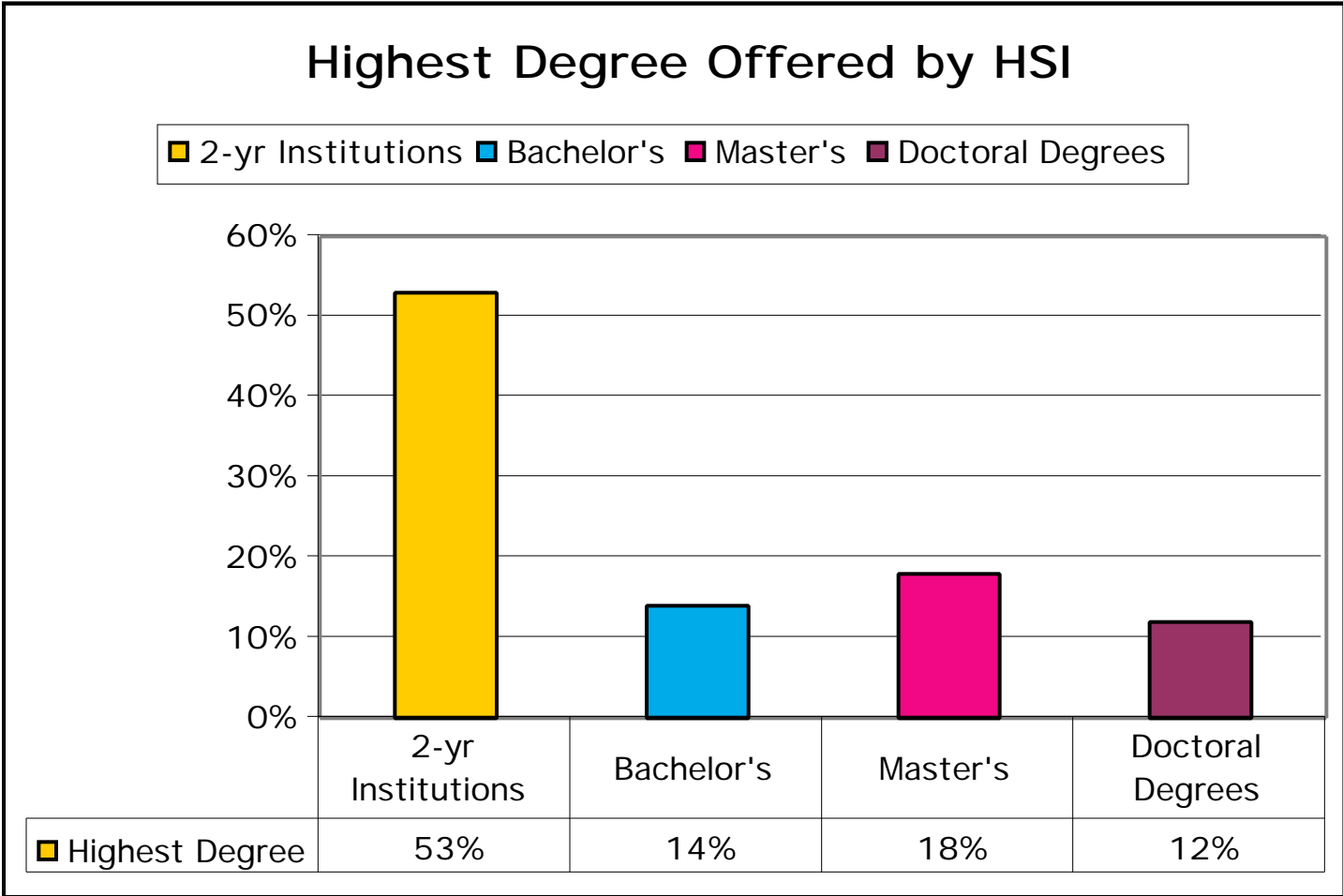
- **Enrollment**
  - Over 50 percent are Hispanic, 72% minorities
  - Close to half of all HSIs (96) have 50 percent or more undergraduate Hispanic student enrollment
- **Computing Programs in HSI**
  - Only 9 accredited programs are in HSI (out of 252 CSAB/ABET programs)
  - 7 in Computer Science, 2 in Computer Engineering
  - Located inCalifornia (3), Florida (3), Texas (2), Puerto Rico

Highest Degree Offered by HSI

Highest Degree Offered by HSI

☐ 2-yr Institutions ☐ Bachelor's ☐ Master's ☐ Doctoral Degrees

☐ Highest Degree	2-yr Institutions	Bachelor's	Master's	Doctoral Degrees
	53%	14%	18%	12%

Academic Environment in General
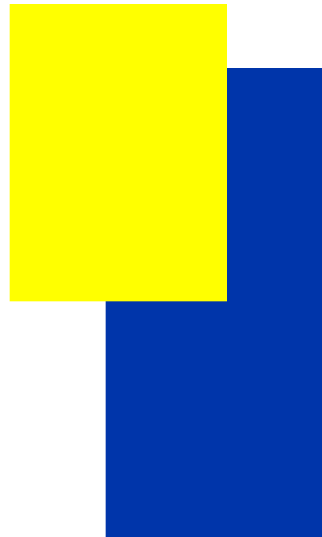
- **Today**
  - 14.5% of total college-age population is Hispanic
  - Most hispanics (53%) enrolled in 2-year institutions
- **In 1992, Hispanics were**
  - less than 3% of full-time faculty/staff in higher education
- **In 1996, Hispanics accounted for**
  - 4% of all Master's degrees
  - 2% of all Doctoral degrees

http://www.ed.gov/offices/OIIA/Hispanics
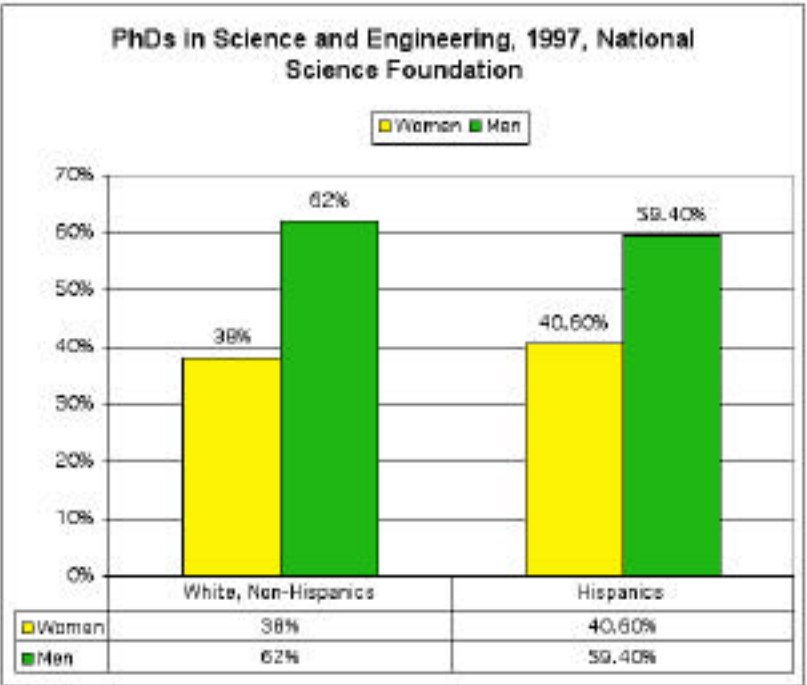
CS/CE Academic Environment

- **Total enrollment in CS/CE Bachelor's and Master's**
  - 3% Bachelor's (366 out of 14,822)
  - 1% Master's (63 out of 6,562)
- **Total Enrollment in CS/CE Phd programs**
  - 1% of PhD Enrollment (84 out of 7,857)
- **Recent PhDs**
  - 2% of recent PhDs in CS&CE (17 out of 881)
- **Newly hired faculty**
  - 2% of Tenure-Track (6 out of 341)
  - 4% of Teaching Faculty (6 out of 166)
  - 0% Researchers, Postdocs, and Others
- **Current Faculty**
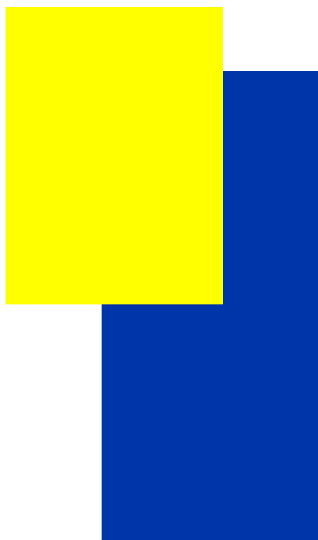 - 2% total at different levels (87 out of 4,403)
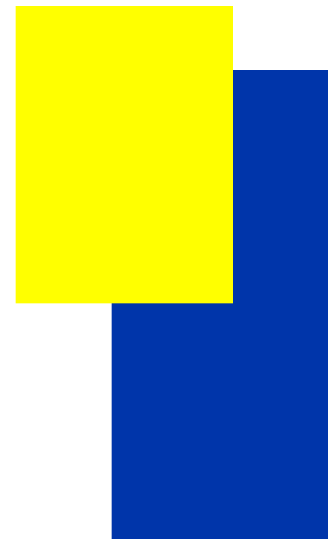
Gender Distribution: Graduate School

- **1997, distribution of Science/Engineering Phd among men/women was no different than White (non-Hispanic)**

PhDs in Science and Engineering, 1997, National Science Foundation

☐ Women ☐ Men

	White, Non-Hispanics	Hispanics
☐ Women	38%	40.60%
☐ Men	62%	59.40%

- **1996, 60% of Hispanics in Graduate school were Women**

http://www.nsf.gov/ &
http://www.ed.gov/offices/OIIA/Hispanics

Pérez-Quiñones Brief Bio

- **Education/Work Experience**
  - PhD George Washington University (1996)
  - 4 years at Universidad de Puerto Rico/Mayaguez
  - 2000-present, Computer Science, Virginia Tech
- **Research areas**
  - Human-Computer Interaction
  - User interface software architectures, dialogue management
  - Social/Cultural issues in Computing/HCI
  - Educational software

http://www.cs.vt.edu/~perez