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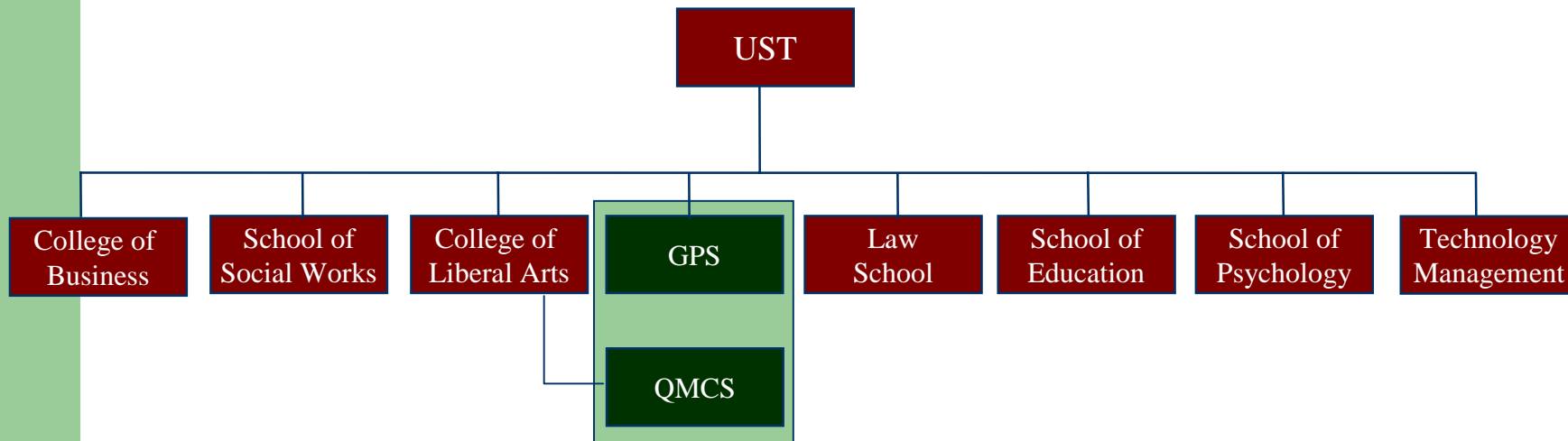
Saeed K. Rahimi
Graduate Programs in Software

Outline

- Demographics
  - Graduate programs in Software (MS)
  - Quantitative Methods and Computer Sciences (BS)
- Relevant Courses
- Labs/Research
- Summary

UST Organization

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│of      ││of      ││of      ││      ││ School ││of      ││of      ││logy    │
│Business││Social  ││Liberal ││      ││        ││Educa-  ││Psycho- ││Manage- │
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                              │ QMCS │
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UST Demographics

- Campuses in St. Paul, Minneapolis & Italy
- Students (2003)
  - Undergraduate   5,108
  - Graduate   5,825
  - Total   10,933
- Faculty (2003)
  - Tenured   231
  - Tenure track   116
  - Limited Term   55
  - Staff   925
  - Total   1,327

Industry Input/Feedback

- GPS started based on needs derived from a survey of local corporations in 1985

- Corporations such as Honeywell, 3M, IBM, NCR Comten, Sperry-UNIVAC, CDC were asked about their needs

- Adaptive curriculum based on frequent surveys of companies where our graduates work

Our Degree Programs

- Graduate
  - Three Master's degrees (MSSE, MSDD, MSS)
  - Three graduate certificates
  - Seminars
  - Mini programs
- Undergraduate
  - BS in computer sciences

Relevant Courses

- Undergraduate Classes
  - QMCS450 – Database Design
  - QMCS350 – Data and File Structures
  - QMCS419 – Information Systems
  - Topic Class – Data Mining

Relevant Courses

- Graduate Classes
    - CS530 – Database Management Systems & Design
    - CS531 – Database Management Systems & Application
    - CS532 – Distributed Database Management
    - CS535 – Information Retrieval
    - CS544 – Object-Oriented Databases
    - CS645 – Strategic Information Systems
    - CS652 – Design of an Integrated Corp. Information System
    - CS68x – Information Security (Topics)
    - CS68x – Intro. to Data Warehousing & E-Commerce (Topics)

Data Admin Or Database Admin

Business Requirement Analysis	**Database Physical Modeling and creation**
Conceptual and Logical modeling	**Database tuning/space management**
Standard data definition	**Backups and recovery**
Meta-data management	**Database integrity management**
Data Stewardship	**User and usage management**

Tools

- Database, Modeling and Data Warehousing
  - Oracle 8i and 9i
  - Microsoft SQL Server 2000
  - Poet Object Oriented database
  - Sybase PowerDesigner   (Data Modeling)
  - Popkin System Architect   (Data Modeling)
  - Rational Rose UML   (OO modeling)
  - Together   (OO Modeling and development)
  - MS Analysis Service   (Data Warehousing/OLAP)
  - Insightful Miner   (Data Mining)

Hands-on to Support Course Work

- Emphasizes all aspects of the life Cycle
    - Students create a working application using a DBMS from the requirements
    - Students create a data warehouse and create OLAP cubes based on the requirements
    - Students create Distributed database system based on the requirements

Research

- Beyond lab work for classes, Master students are encouraged to do research:
  - Distributed System Lab
    - Testbed for doing research in databases, dist databases, data mining, and data warehousing
  - Web Lab
    - Testbed for doing research in web design and development and database access across the web
  - OO Lab
    - Testbed for doing research in object-oriented systems based on OO database technology

Call for Papers

- Theme: Emerging technologies
- Dates: August 25th and 26th
- Location: UST Minneapolis Campus
- Papers due: May 1st
- More information:

    www.rfbinternational.com/icet03.htm

    Email: skrahimi@stthomas.edu

Discussion/Questions

Contact:

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