

COT 4810: Topics in Computer Science
Schedule for presentations
Spring 2004

Jan. 5

Introductory class. Logistics.

Jan. 7

Automated Laser Diode Characterization using XMLRPC / TCL / Visual Basic
(Jonathan S. Romero)

Expert Systems Shells(Sean Williams)

Jan. 9

Linux kernel/hardware configuration(Greg Meno)

Jan. 12

Relational Databases(Doug Hathaway)

Discrete Event Simulation(Stephen Connetti)

Jan. 14

Neural Networks that Learn (Ricardo Lugo)

Jan. 16

Class Cancelled

Jan. 21

Computer Forensics(Andrew Ramka)

Public key Cryptography(Andrew Spaulding)

Jan. 23

Storing Images using Quadrees(Richard Lum)

Parallel Computing(Charles Ahern)

Jan. 26

Church's Thesis (Corey Reece)

Aspect-Oriented Programming(Thomas Meeks)

Jan. 28

Implications of 64 bits processors(Mark Colbert)

Detecting Primes(David Morrell)

Jan. 30

Nanotechnology (Daniel Roop)

Information Retrieval (San Carswell)

Feb. 2
Game Trees(Paul Walker)
Shadow Volumes(Jaakko Konttinen)

Feb. 4
Newton-Raphson Method(Miguel Pilar)
Recursion(Ghada Sallit)

Feb. 6
Computer viruses(Thomas Sears)
Godel's Theorem(Timothy Rosenblatt)

Feb. 9
3D Graphics Pipeline(Greg MacDonald)
VLSI Computers(Ryan Gaskill)

Feb. 11
Text Compression: Huffman Encoding(Dusty Price)
Error-Correcting Codes: Pictures from Space(Jesse Dean)

Feb. 13
DVD backup and decryption(Jan Svoboda)
Bluetooth(Jon Gluvna)

Feb. 16
Web Content Syndication (Tyler Hunt)
Program Correctness(Jonathan S. Romero)

Feb. 18
Genetic Algorithms (Sean Williams)
Time and Space Complexity (Greg Meno)

Feb. 20
Fast Multiplication (Doug Hathaway)
Perceptrons (Stephen Connetti)

Feb. 23
CAT Scanning(Ricardo Lugo)
The Fast Fourier Transform(Andrew Ramka)

Feb. 25
Analog Computation(Andrew Spaulding)
The Partition Problem(Richard Lum)

Feb. 27

Satisfiability(Charles Ahern)

Sparse Matrix Storage Formats (Corey Reece)

March 1

Cellular Automata (Thomas Meeks)

Shannon's Theory (Mark Colbert)

March 3

Systolic Arrays (David Morrell)

?????????(Daniel Roop)

March 5

Searching strings with Boyer-Moore algorithm (San Carswell)

Data Flow Computers (Paul Walker)

March 15

Quantum Computing (Jaakko Konttinen)

DNA Computing (Miguel Pilar)

March 17

Coda File System(Ghada Sallit)

Vector Processing (Thomas Sears)

March 19

Performance Evaluation (Timothy Rosenblatt)

Watermarking (Greg MacDonald)

March 22

RAID (Ryan Gaskill)

MEMS Based Storage Devices (Dusty Price)

March 24

Ray Casting (Jesse Dean)

General Recursive Functions (Jan Svoboda)

March 26

Halting Problem (Jon Gluvna)

Earth Simulator (Tyler Hunt)

March 29: **Yahoo**

Jonathan S. Romero

Sean Williams

Greg Meno

March 31: **Google**

Doug Hathaway
Stephen Connetti
Ricardo Lugo

April 2: **Altavista**

Andrew Ramka
Andrew Spaulding
Richard Lum

April 5: **Infoseek**

Charles Ahern
Corey Reece
Thomas Meeks

April 7: **Lycos**

Mark Colbert
David Morrell
Daniel Roop

April 9: **Netscape**

San Carswell
Paul Walker
Jaakko Konttinen

April 12: **Explorer**

Miguel Pilar
Thomas Sears
Timothy Rosenblatt

April 14: **Registration System**

Greg MacDonald
Ryan Gaskill
Dusty Price

April 16: **Exel**

Jesse Dean
Jan Svoboda

April 19: **Powerpoint**

Jon Gluvna
Tyler Hunt