Re:Search

Rachata Chantarasombat
Matt Drought
Derek Awtry

Project Overview

- Easier way to find professors to work with
- Crawl directory biographies
- Create search engine for faculty directory
- Provide user friendly interface with contact information

Inspiration for Re:Search

- Inconsistency in faculty information
- University directory not user friendly
- No existing alternatives for students to use

Examples

Research
Consulting Center
Giving
Contact Us

Research Themes

Statistics Home
For Students
Department Directory
Research
Consulting Center
Giving
Contact Us

Fundamental Research in Statistics

- Nonparametric and semiparametric statistics
- Bayesian methods and machine learning
- Inferential methods for dependent and longitudinal data
- High dimensional data analysis and model selection
- Monte Carlo methods in statistical computing
- Time series and spatial-temporal models

Large-Scale Statistical Modeling and Analysis

- Statistical Inference and Machine Learning for high dimensional data
- Functional image analysis in medicine and neuroscience
- Climate modeling
- Network analysis
- Multivariate methods for complex statistical surveys and instruments

Biostatistics and Quantitative Biology

- Statistical approaches to integration of mass spectral and genomics data
- Low-rank representation of high-dimensional genomics data
- Statistical analysis for gene regulatory networks
- Statistical modeling in ecology
- Generalized Survival and Longitudinal Analysis

Steven A. Culpepper
Assistant Professor
116D IH, MC-374
sculpepp 333-2167

David Dalpiaz
Visiting Assistant Professor
114 IH, MC-374
dalpiaz2 333-2167

Jeffrey A. Douglas
Professor
116E IH, MC-374
jeffdoug 244-7302

Georgios Fellouris
Assistant Professor
119 IH, MC-374
fellouri 333-2167

Ellen Fireman
Senior Lecturer
108 IH, MC-374
fireman 333-2167

Darren Glosemeyer
Instructor, Advisor
103B IH, MC-374
glosemey 333-2167

Stephane Guerrier
Assistant Professor
101 IH, MC-374
stephane 333-2167

Karle Laska
Instructor
110 IH, MC-374
laska1 333-2167

Kiryung Lee
Visiting Assistant Professor
114 IH, MC-374
klee81 333-2167

Bo Li
Associate Professor
118 IH, MC-374
libo 333-2167

Feng Liang
Associate Professor
116A IH, MC-374
liangf 333-2167

John I. Marden
Professor Emeritus
115 IH, MC-374
jimarden 333-3199

Adam T. Martinsek
Professor Emeritus
115 IH, MC-374
martinse 333-2167

Ditlev Monrad
Associate Professor Emeritus
122A IH, MC-374
d-monrad 333-6408

Trevor Park
Visiting Assistant Professor
115 IH, MC-374
thp2 333-2167

Stephen Portnoy
Professor Emeritus
122B IH, MC-374
sportnoy 333-2167

Annie Qu
Professor
116B IH, MC-374
anniequ 333-2167

Uma Ravat
Lecturer
110 IH, MC-374
333-2167

Xiaofeng Shao
Associate Professor
104C IH, MC-374
xshao 244-7285

Douglas G. Simpson
Professor
120 IH, MC-374
dgs 333-2167

Alexey G. Stepanov
Senior Lecturer
101A IH, MC-374
stepanov 333-2167

William F. Stout
Professor Emeritus
122A IH, MC-374
w-stout1 333-2167

David Unger
Instructor, Advisor
116F IH, MC-374
dunger 333-2167

Michelle Y. Wang
Associate Professor
116C IH, MC-374
ymw 244-2694

CS @ ILLINOIS
COMPUTER SCIENCE

Prospective Students
Current Students
Courses
Alumni
Research
Research Areas
Architecture, Compilers, and Parallel Computing
Systems and Networking
Theory & Algorithms
Artificial Intelligence
Programming Languages, Formal Methods, & Software Engineering
Database & Information Systems
Graphics, Visualization, and HCI
Scientific Computing
Bioinformatics & Computational Biology
Research Centers
Student Research
News
Corporate Partners
About Us
Faculty Candidates
Staff Positions
Directory
Giving

Research

Architecture, Compilers, and Parallel Computing

- Topics
- Faculty
- Centers and Labs

Topics

Architecture and compiler research focuses on hardware designs, programming languages and their compilers for next-generation computers and computing components.

Parallel Computing research includes the entire spectrum, from extreme scale computing to new ways to bring parallel computing to mainstream devices and human-centered applications.

Faculty

Marc Snir	large-scale parallel systems, architecture
Laxmikant Kale	numerical, parallel, and scientific computing
Klara Nahrstedt	multimedia middleware, QoS, pervasive computing
Sarita Adve	parallel computing, architecture, low-power systems
William Gropp	parallel computing
Wen-mei Hwu	architecture, HPC and parallel systems, compilers
Vikram Adve	compilers, software reliability, architecture
Gul Agha	distributed systems
David Padua	parallel computing, compilers, architecture

Prospective Students
Current Students
Courses
Alumni
Research
News
Corporate Partners
About Us
Faculty Candidates
Staff Positions
Directory
Faculty
Staff
Offices and Contacts
Giving

Give Now

Calendar
Twitter
Facebook
LinkedIn
CS Store


Marc Snir

Marc Snir

Michael Faiman and Saburo Muroga Professor
(217) 244-6568
snir@illinois.edu
4232 Siebel Center for Comp Sci

Overview | Academics | Research | Publications | Honors

Education

Ph.D., Hebrew University of Jerusalem (supervisor, Professor Eli Shamir), 1979

Academic Positions

- 2007-2012, Lead Architect, Blue Waters system software, NCSA
- 2007-2011, Co-director, UPCRC
- 2007-2011, Professor (0%), Graduate School of Library and Information Science, University of Illinois at U-C
- 2001-present, Richard Faiman and Saburo Muroga Professor, Department of Computer Science, University of Illinois at U-C

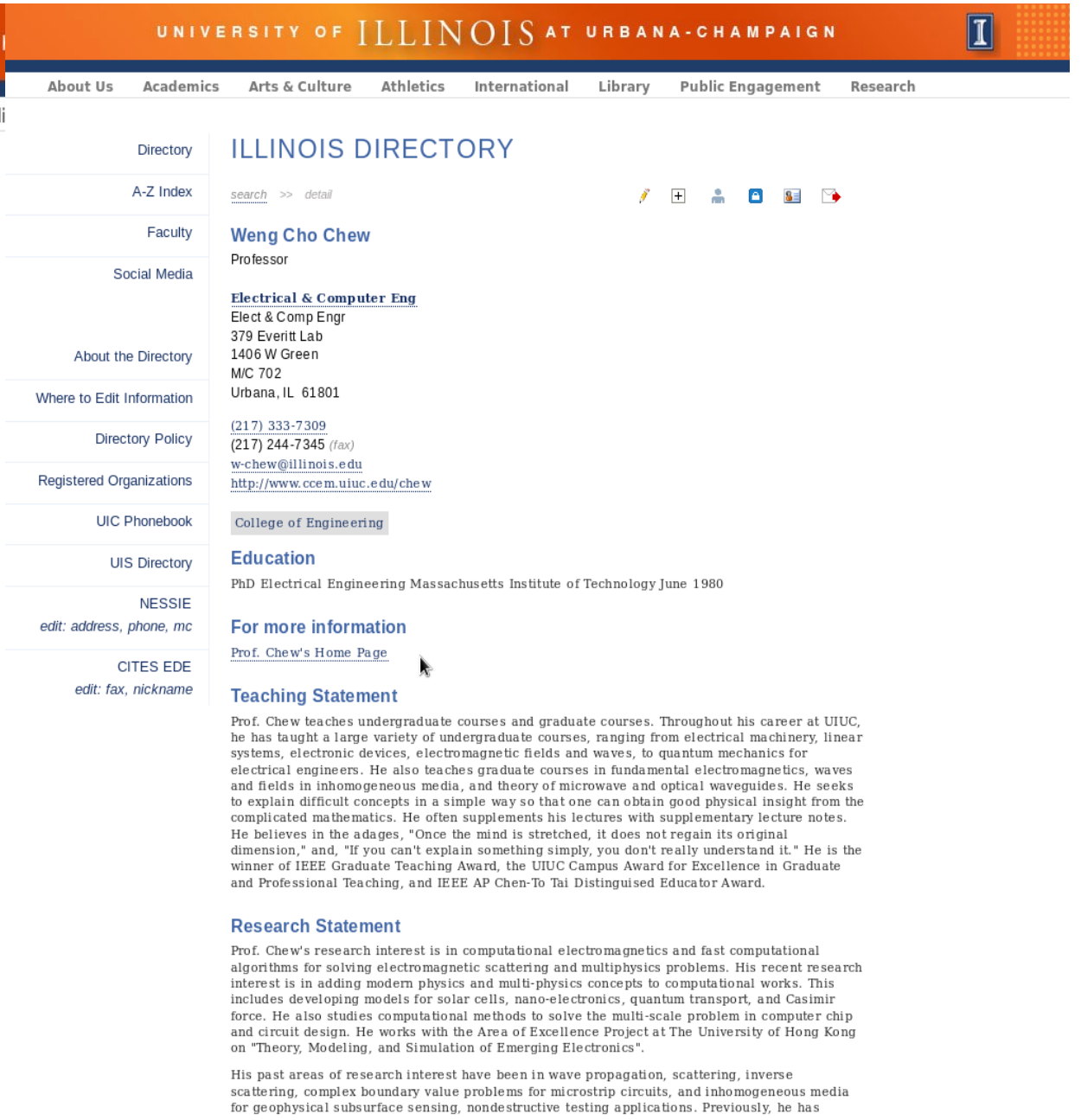
For more information

Marc Snir's home page

Related Stories

- Calhoun Receives Blue Waters Graduate Fellowship for Work on Algebraic Multigrid
- CS @ ILLINOIS Has Strong Showing at SC13
- Illinois Symposium on Parallelism Celebrates a Tradition of Innovation
- Snir Receives 2013 IEEE Computer Society Seymour Cray Award
- Marc Snir Wins IEEE Award for Excellence in Scalable Computing
- Snir Named HPC Person to

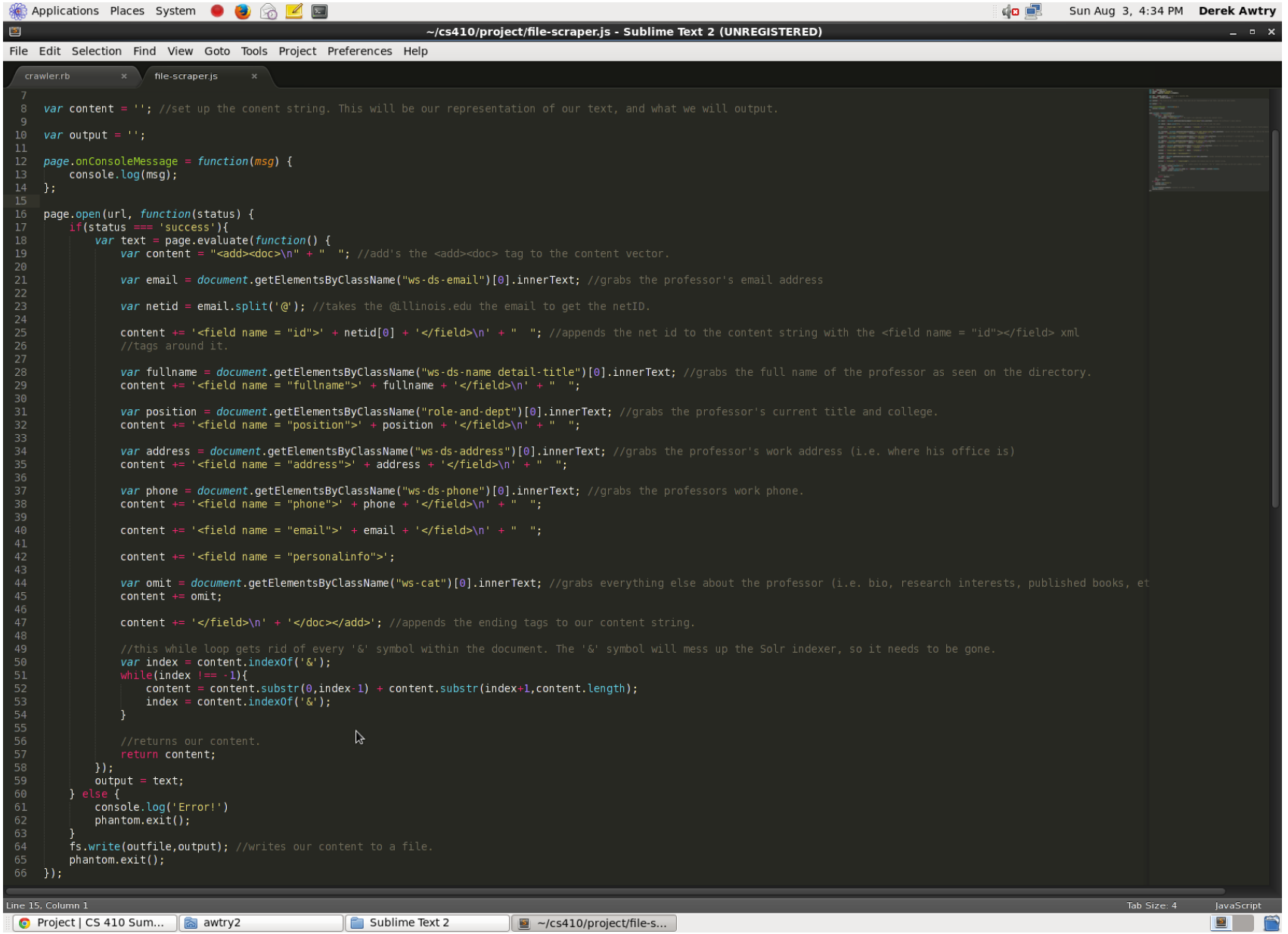

UNIVERSITY OF ILLINOIS AT URBANA-CI
About Us
Academics
Arts & Culture
Athletics
International
Library
Publi
Directory
A-Z Index
Faculty
Social Media
About the Directory
Where to Edit Information
Directory Policy
Registered Organizations
UIC Phonebook
UIS Directory
NESSIE
edit: address, phone, mc
CITES EDE
edit: fax, nickname
ILLINOIS FACULTY
Agricultural, Consumer, and Environmental Sciences, College of
Agricultural and Biological Engineering, Department of
Agricultural and Consumer Economics, Department of
Animal Sciences, Department of
Crop Sciences, Department of
Food Science and Human Nutrition, Department of
Human and Community Development, Department of
Natural Resources and Environmental Sciences, Department of
Applied Health Sciences, College of
Kinesiology and Community Health, Department of
Business, College of
Accountancy, Department of
Business Administration, Department of
Finance, Department of
College of Engineering
Aerospace Engineering, Department of
Bioengineering, Department of
Civil and Environmental Engineering, Department of
Computer Science, Department of
Abdelzaher, Tarek, Professor
Adve, Sarita V, Professor
Adve, Vikram Sadanand, Professor
Agha, Gul A, Professor


UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
About Us
Academics
Arts & Culture
Athletics
International
Library
Public Engagement
Research
Directory
A-Z Index
Faculty
Social Media
About the Directory
Where to Edit Information
Directory Policy
Registered Organizations
UIC Phonebook
UIS Directory
NESSIE
edit: address, phone, mc
CITES EDE
edit: fax, nickname
ILLINOIS DIRECTORY
search >> detail
Weng Cho Chew
Professor
Electrical & Computer Eng
Elect & Comp Engr
379 Everitt Lab
1406 W Green
M/C 702
Urbana, IL 61801
(217) 333-7309
(217) 244-7345 (fax)
w-chew@illinois.edu
http://www.ccem.uiuc.edu/chew
College of Engineering
Education
PhD Electrical Engineering Massachusetts Institute of Technology June 1980
For more information
Prof. Chew's Home Page
Teaching Statement
Prof. Chew teaches undergraduate courses and graduate courses. Throughout his career at UIUC, he has taught a large variety of undergraduate courses, ranging from electrical machinery, linear systems, electronic devices, electromagnetic fields and waves, to quantum mechanics for electrical engineers. He also teaches graduate courses in fundamental electromagnetics, waves and fields in inhomogeneous media, and theory of microwave and optical waveguides. He seeks to explain difficult concepts in a simple way so that one can obtain good physical insight from the complicated mathematics. He often supplements his lectures with supplementary lecture notes. He believes in the adages, "Once the mind is stretched, it does not regain its original dimension," and, "If you can't explain something simply, you don't really understand it." He is the winner of IEEE Graduate Teaching Award, the UIUC Campus Award for Excellence in Graduate and Professional Teaching, and IEEE AP Chen-To Tai Distinguised Educator Award.
Research Statement
Prof. Chew's research interest is in computational electromagnetics and fast computational algorithms for solving electromagnetic scattering and multiphysics problems. His recent research interest is in adding modern physics and multi-physics concepts to computational works. This includes developing models for solar cells, nano-electronics, quantum transport, and Casimir force. He also studies computational methods to solve the multi-scale problem in computer chip and circuit design. He works with the Area of Excellence Project at The University of Hong Kong on "Theory, Modeling, and Simulation of Emerging Electronics".
His past areas of research interest have been in wave propagation, scattering, inverse scattering, complex boundary value problems for microstrip circuits, and inhomogeneous media for geophysical subsurface sensing, nondestructive testing applications. Previously, he has

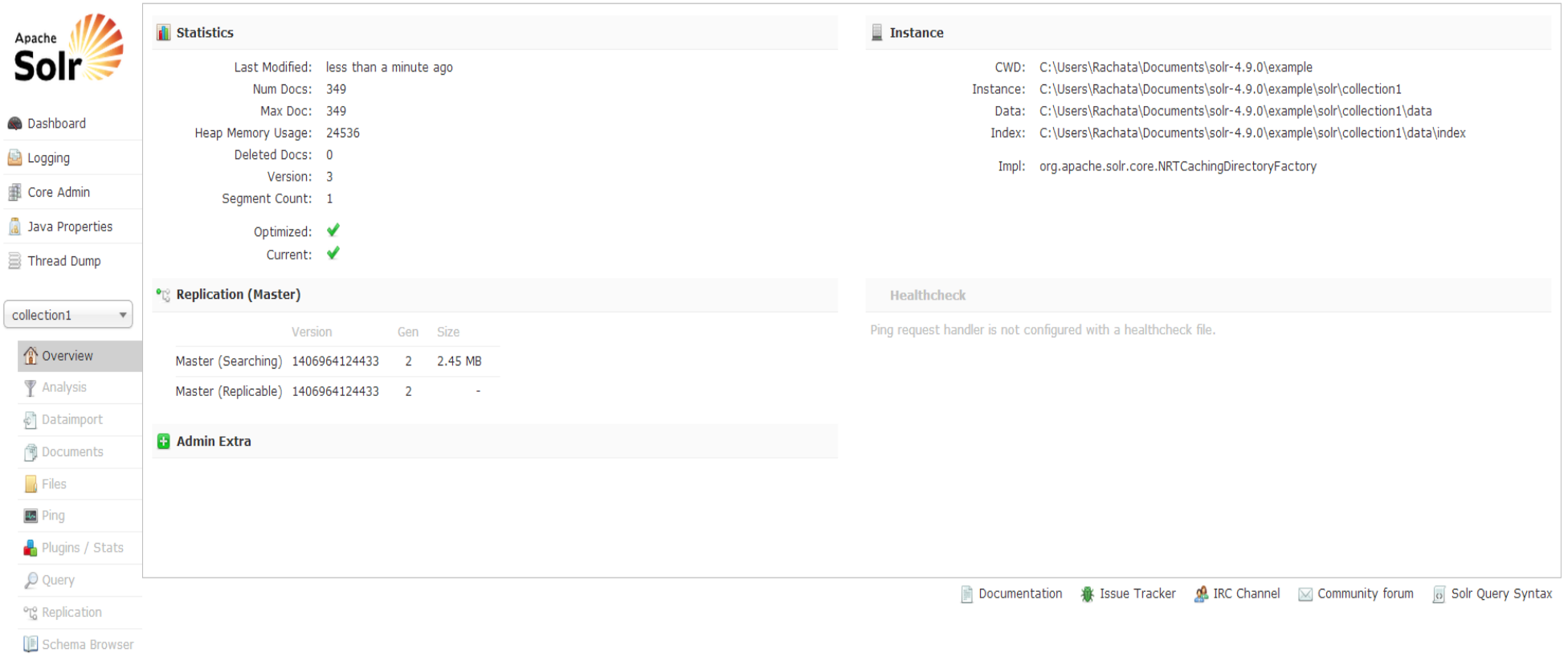
Implementation

- Crawled a list of netIDs with useful information
- Output the web pages into XML format
- Solr indexes the XML documents
- Velocity provided a nicer user interface

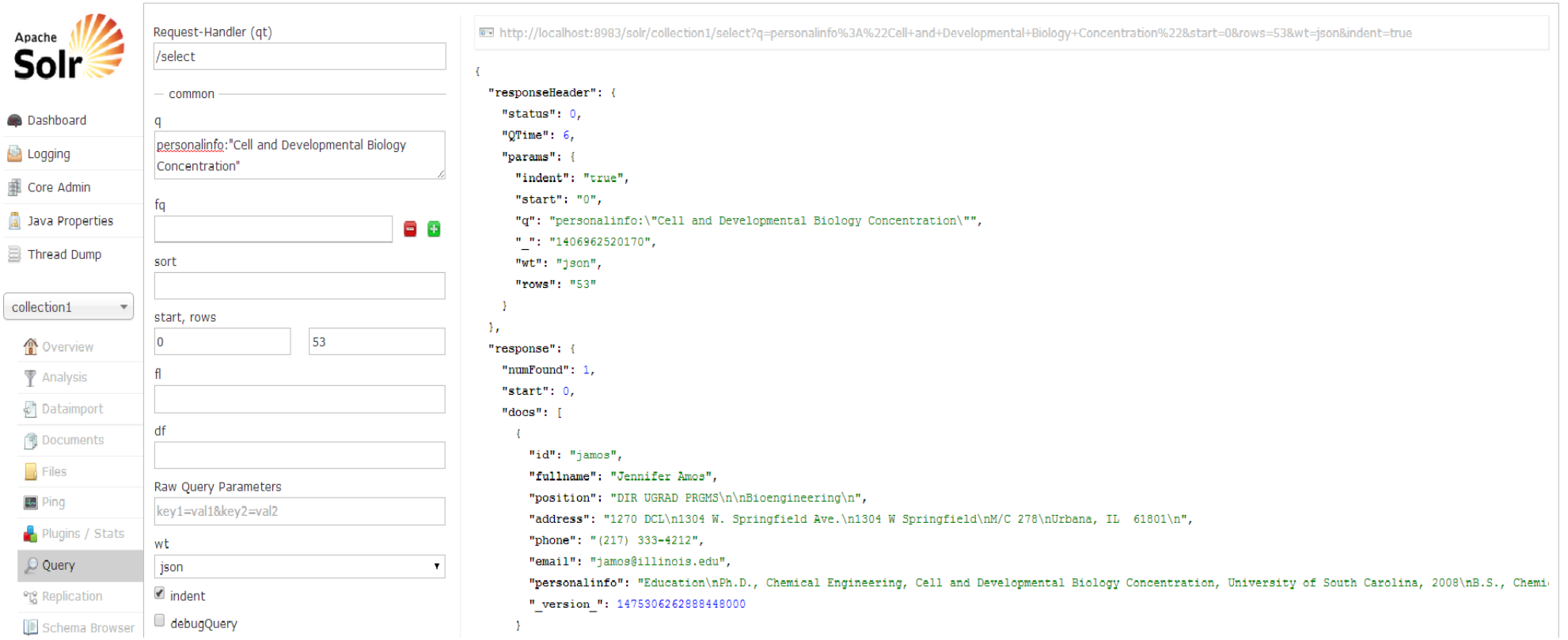
Scraper and Crawler



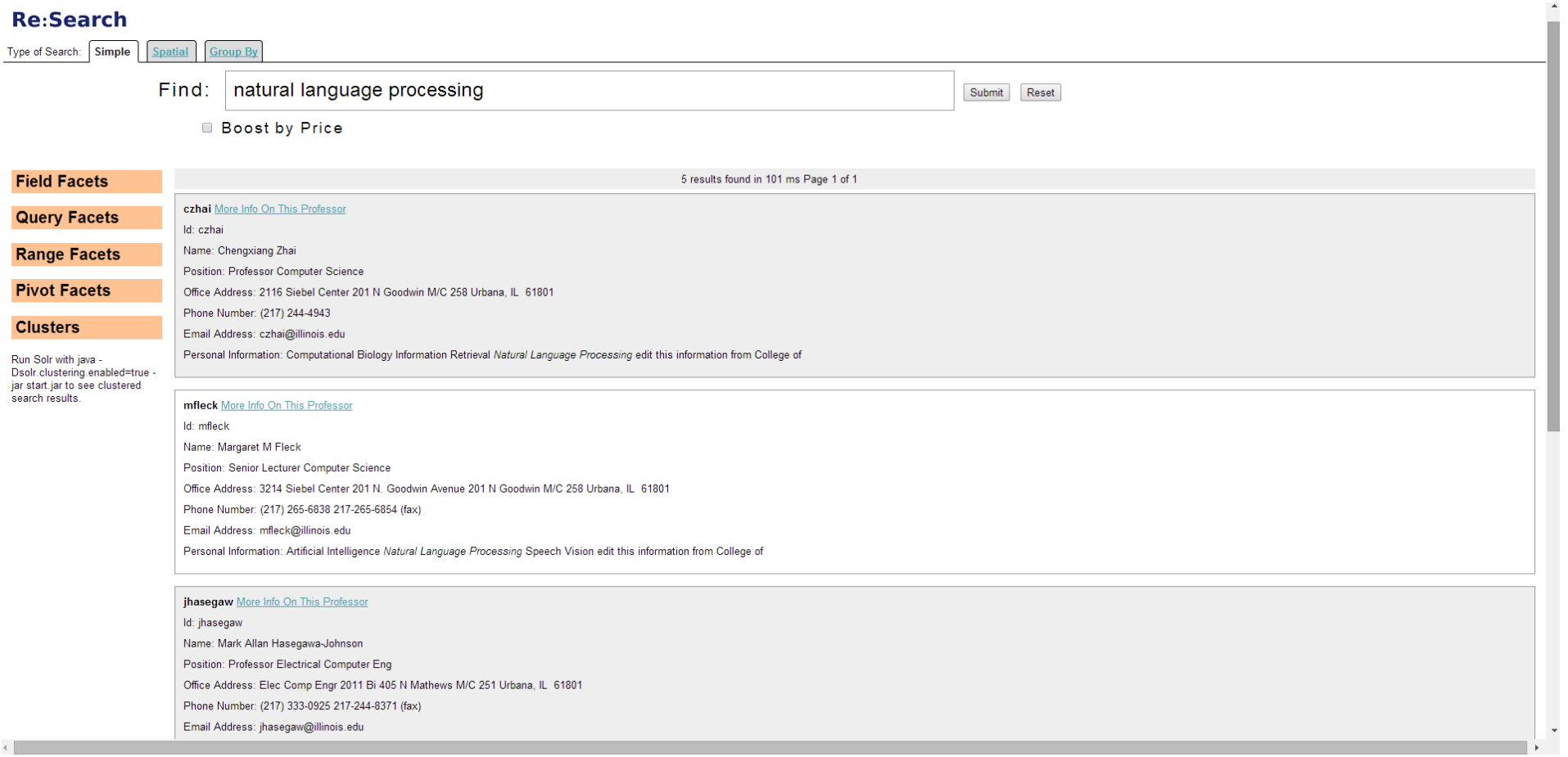
Solr Administrator Pages



Solr Search


Apache Solr
Dashboard
Logging
Core Admin
Java Properties
Thread Dump
collection1
Overview
Analysis
Dataimport
Documents
Files
Ping
Plugins / Stats
Query
Replication
Schema Browser
Request-Handler (qt)
/select
common
q
personalinfo:"Cell and Developmental Biology Concentration"
fq
sort
start, rows
0
53
fl
df
Raw Query Parameters
key1=val1&key2=val2
wt
json
indent
debugQuery
http://localhost:8983/solr/collection1/select?q=personalinfo%3A%22Cell+and+Developmental+Biology+Concentration%22&start=0&rows=53&wt=json&indent=true
{
"responseHeader": {
"status": 0,
"QTime": 6,
"params": {
"indent": "true",
"start": "0",
"q": "personalinfo:\"Cell and Developmental Biology Concentration\"",
"_": "1406962520170",
"wt": "json",
"rows": "53"
}
},
"response": {
"numFound": 1,
"start": 0,
"docs": [
{
"id": "jamos",
"fullname": "Jennifer Amos",
"position": "DIR UGRAD PRGMS\n\nBioengineering\n",
"address": "1270 DCL\n1304 W. Springfield Ave.\n1304 W Springfield\nM/C 278\nUrbana, IL 61801\n",
"phone": "(217) 333-4212",
"email": "jamos@illinois.edu",
"personalinfo": "Education\nPh.D., Chemical Engineering, Cell and Developmental Biology Concentration, University of South Carolina, 2008\nB.S., Chemi
"_version_": 1475306262888448000
}

Velocity Search

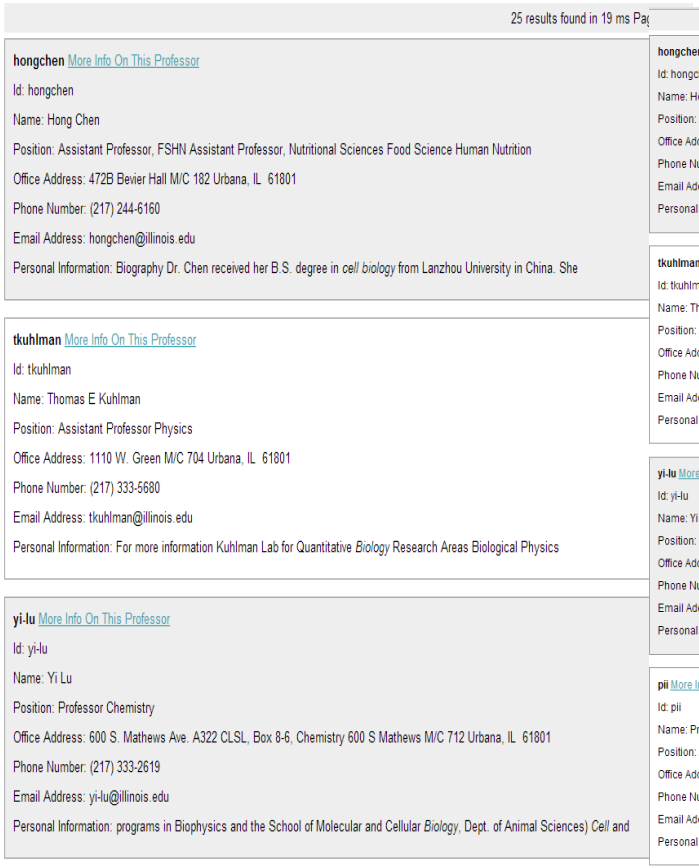


Experiments

- Tested Okapi BM25, Dirichlet-Prior, and Jelinek-Mercer against simple keyword matching
- All returned similar results
- Okapi was slightly faster

“Cell Biology”

Okapi



25 results found in 19 ms Pa

hongchen More Info On This Professor

Id: hongchen

Name: Hong Chen

Position: Assistant Professor, FSHN Assistant Professor, Nutritional Sciences Food Science Human Nutrition

Office Address: 472B Bevier Hall M/C 182 Urbana, IL 61801

Phone Number: (217) 244-6160

Email Address: hongchen@illinois.edu

Personal Information: Biography Dr. Chen received her B.S. degree in *cell biology* from Lanzhou University in China. She

tkuhlman More Info On This Professor

Id: tkuhlman

Name: Thomas E Kuhlman

Position: Assistant Professor Physics

Office Address: 1110 W. Green M/C 704 Urbana, IL 61801

Phone Number: (217) 333-5680

Email Address: tkuhlman@illinois.edu

Personal Information: For more information Kuhlman Lab for Quantitative *Biology* Research Areas Biological Physics

yi-lu More Info On This Professor

Id: yi-lu

Name: Yi Lu

Position: Professor Chemistry

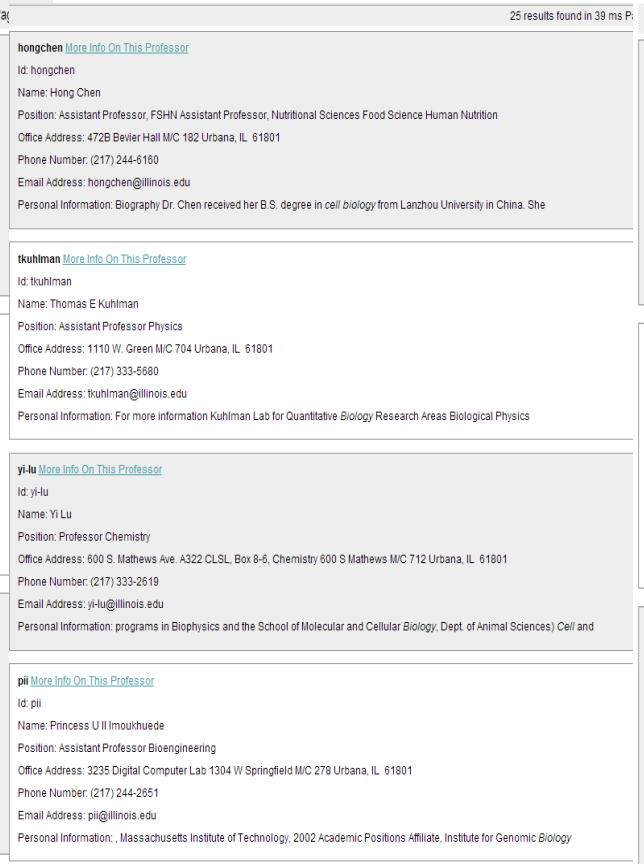
Office Address: 600 S. Mathews Ave. A322 CLSL, Box 8-6, Chemistry 600 S Mathews M/C 712 Urbana, IL 61801

Phone Number: (217) 333-2619

Email Address: yi-lu@illinois.edu

Personal Information: programs in Biophysics and the School of Molecular and Cellular *Biology*, Dept. of Animal Sciences) *Cell* and

Jelinek-Mercer



25 results found in 39 ms P

hongchen More Info On This Professor

Id: hongchen

Name: Hong Chen

Position: Assistant Professor, FSHN Assistant Professor, Nutritional Sciences Food Science Human Nutrition

Office Address: 472B Bevier Hall M/C 182 Urbana, IL 61801

Phone Number: (217) 244-6160

Email Address: hongchen@illinois.edu

Personal Information: Biography Dr. Chen received her B.S. degree in *cell biology* from Lanzhou University in China. She

tkuhlman More Info On This Professor

Id: tkuhlman

Name: Thomas E Kuhlman

Position: Assistant Professor Physics

Office Address: 1110 W. Green M/C 704 Urbana, IL 61801

Phone Number: (217) 333-5680

Email Address: tkuhlman@illinois.edu

Personal Information: For more information Kuhlman Lab for Quantitative *Biology* Research Areas Biological Physics

yi-lu More Info On This Professor

Id: yi-lu

Name: Yi Lu

Position: Professor Chemistry

Office Address: 600 S. Mathews Ave. A322 CLSL, Box 8-6, Chemistry 600 S Mathews M/C 712 Urbana, IL 61801

Phone Number: (217) 333-2619

Email Address: yi-lu@illinois.edu

Personal Information: programs in Biophysics and the School of Molecular and Cellular *Biology*, Dept. of Animal Sciences) *Cell* and

pii More Info On This Professor

Id: pii

Name: Princess U Il Imoukhuede

Position: Assistant Professor Bioengineering

Office Address: 3235 Digital Computer Lab 1304 W Springfield M/C 278 Urbana, IL 61801

Phone Number: (217) 244-2651

Email Address: pii@illinois.edu

Personal Information: , Massachusetts Institute of Technology, 2002 Academic Positions Affiliate, Institute for Genomic *Biology*

Dirichlet-Prior

25 results found in 99 ms Page 1 of 3

nwangrw More Info On This Professor

Id: nwangrw

Name: Ning Wang

Position: Professor Mechanical Sci Engineering

Office Address: 2326 MEL M/C 244 Urbana, IL 61801

Phone Number: (217) 265-0913

Email Address: nwangrw@illinois.edu

Personal Information: Physiology and *Cell Biology*, Harvard School of Public Health, July 2005-February 2006. Associate Professor

pii More Info On This Professor

Id: pii

Name: Princess U Il Imoukhuede

Position: Assistant Professor Bioengineering

Office Address: 3235 Digital Computer Lab 1304 W Springfield M/C 278 Urbana, IL 61801

Phone Number: (217) 244-2651

Email Address: pii@illinois.edu

Personal Information: , Massachusetts Institute of Technology, 2002 Academic Positions Affiliate, Institute for Genomic *Biology*

gunderhi More Info On This Professor

Id: gunderhi

Name: Gregory H Underhill

Position: Assistant Professor Bioengineering

Office Address: 3236 Digital Computer Lab 1304 W Springfield M/C 278 Urbana, IL 61801

Phone Number: (217) 244-2169

Email Address: gunderhi@illinois.edu

Personal Information: Faculty, Institute for Genomic *Biology*, University of Illinois at Urbana-Champaign, 3/2012-present

Obstacles

- Lack of consistency in information provided
- Solr's documentation is lacking

Future Work

- Creating an independent search engine
- Expanding our corpus (WINACS)
- Perform more tests for optimization
- Include custom similarity function

Questions?