

## CHUN-NAM YU

### CONTACT INFORMATION

Address: 4130 Upson Hall  
Department of Computer Science  
Cornell University  
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### EDUCATION

**Cornell University**  
Ph.d. Student in Computer Science  
Advisor: Thorsten Joachims  
2004 - Current

**Wadham College, Oxford University, UK**  
B.A. in Mathematics & Computer Science (First Class Honour)  
2001 – 2004

**Diocesan Boys' School, Hong Kong**  
1994 - 2001

### RESEARCH INTERESTS

Support Vector Machines, Large Margin Structure Learning,  
Statistical Consistency of Large Margin Methods,  
Sequence Alignment, Homology Modeling

### PUBLICATIONS

**Support Vector Training of Protein Alignment Models**  
*(with T. Joachims, R. Elber and J. Pillardy)*  
Proceeding of the International Conference on  
Research in Computational Biology (RECOMB), 2007.

**Training Protein Threading Models Using Structural SVMs**  
*(with T. Joachims and R. Elber)*  
ICML Workshop on Learning in Structured Output Spaces, 2006

### RESEARCH EXPERIENCE

**Research Assistant to Prof. Thorsten Joachims**  
Worked on the problem of protein sequence alignment under the  
guidance of Prof. Joachims and Prof. Elber. Designed and implemented  
various speedup to make the SVM software to make this structure  
learning problem tractable on a large scale.  
(2005 - Current)

**Undergraduate research project with Dr. Jeff Sanders**  
Investigated the semantics of probabilistic guarded command language  
(pGCL) in formal methods (2003-2004)

### TEACHING EXPERIENCE

**Teaching Assistant for CS478 Machine Learning**  
Responsible for designing homeworks and lecturing when instructor  
travels (Spring 2007)

## **AWARDS AND HONORS**

The Olin Fellowship (2004 - 2005)  
Wadham College Scholarships (2002 – 2004)  
The Corcoran Prize (First Public Exam, Maths & Joint School, 2002)  
Lee Shau Kee Scholarship (for study at Oxford University, 2001 - 2004)  
Rensselaer Polytechnic Institute Mathematics & Science Medal Award (1999)  
Government Scholarships, HKSAR (1999-2001)

## **RELEVANT COURSES**

### **Graduate:**

CS478 Machine Learning (T. Joachims)  
CS578 Empirical Methods in Machine Learning and Data Mining (R. Caruana)  
CS678 Advanced Topics in Machine Learning (Structure Learning) (T. Joachims)  
CS678 Advanced Topics in Machine Learning (Various Topics) (R. Caruana)  
CS626 Computational Molecular Biology (R. Elber)  
CS672 Advanced Artificial Intelligence (B. Selman)  
CS681 Analysis of Algorithms (D. Kozen)  
CS611 Advanced Programming Languages (A. Myers)  
CS486 Applied Logic (C. Kreitz and R. Pucella)  
MATH671 Probability I (E. Dynkin)  
MATH672 Probability II (Stochastic Processes) (E. Dynkin)  
ORIE634 Approximation Algorithms (D. Williamson)  
ECON368 Introduction to Game Theory (L. Blume)

### **Undergraduate:**

Intelligent Systems, Advanced Data Structures and Algorithms, Formal Program Design, Programming Languages and Compilers, Computational Complexity  
b4 Analysis (Banach and Hilbert Spaces), b10 Number Theory, b1 Logic (Axiomatic Set Theory and First Order Logic), a1 Linear Algebra, a2 Complex Analysis and Geometry, a4 Integration, a5 Probability and Statistics

## **SKILLS**

### **Programming Languages:**

C, Pascal, Perl, Python, ML, Haskell, Prolog, Matlab, Maple

### **Operating Systems:**

Windows, Linux, Solaris

### **Natural Languages:**

English, Cantonese, Mandarin

## **REFERENCES**

### **Thorsten Joachims**

Associate Professor  
Department of Computer Science  
Cornell University, Ithaca NY 14853

Email: tj@cs.cornell.edu

**Ron Elber**

Professor

Department of Computer Science

Cornell University, Ithaca NY 14853

Email: ron@cs.cornell.edu

**PERSONAL  
INFORMATION**

Citizenship: Hong Kong SAR

US Immigration Status: F1 Student Visa