AREL CORDERO

University of California, Berkeley
Graduate Student, Dept. of Computer Science

OBJECTIVE

Complete a Ph.D. in computer science and advance the state of the art in election security to benefit democracy.

EDUCATION

2003-*present*	University of California, Berkeley Ph.D. student in Computer Science, Artificial Intelligence	3.71 GPA
1997-2003	University of Oregon, Eugene Bachelor of Science, Computer and Information Science Bachelor of Music, Music Performance, violin	3.94 GPA

PUBLICATIONS

"Dice's Role in Election Audits," Arel Cordero, David Wagner, David Dill. *IAVoSS Workshop On Trustworthy Elections (WOTE 2006), June 29, 2006.*

"JFKengine: a Jacobian and Forward Kinematics Generator," Kathleen N. Fischer, David L. Jung, Arel L. Cordero, Warren E. Dixon, François G. Pin. *Oak Ridge National Laboratory Technical Document*, March 2003

"Refining Refinement: Benefiting from Awareness of the Incomplete Model in Computational Crystallography," *Abstract.* Undergraduate Research Journal, Office of Science, U.S. Department of Energy.

"Exploitation of Obstacles to Increase Strength in a Highly Redundant Manipulator Using the Full Space Parameterization (FSP) Method," *Abstract.* Undergraduate Research Journal, Office of Science, U.S. Department of Energy.

EXPERIENCE

June 2005-Aug. 2005	Internship at Open Source Applications Foundation. Developed for Chandler, a personal information manager and wxWidgets, a cross-platform GUI framework.
Jan. 2005-May 2005	Taught Artificial Intelligence course as Graduate Student Instructor. Responsible for two thirty-student sections, testing code and grading.
Aug. 2004	Mentor for Berkeley Foundation for Opportunities in Information Technology (www.bfoit.org). Introduced middle and high school students to computer science to improve the representation of woman and minorities in science and engineering.
June 2003-Aug. 2003	Research Internship at Bell Labs, Murray Hill, NJ. Developed simulation of Raman amplification for optical information systems.
June 2002-Aug. 2002	Research Internship at Lawrence Berkeley Laboratory, Berkeley, CA. Evaluated algorithms for structure refinement of protein molecules for computational X-ray crystallography.
June 2001-Aug. 2001	Research Internship at Oak Ridge National Laboratory, TN, Robotics Division. Developed simulation system for mobile manipulators.

AWARDS

2004-2005	*Siebel Scholar*, Siebel Systems
2003-2006	*Bell Labs Graduate Research Fellowship*, Lucent Technologies
2003	*Graduate Fellowship*, UC Berkeley
2002	*Outstanding Undergraduate Award, Honorable Mention*, Computing Research Association.
2002	*Target of Opportunity Laurel Award*, University of Oregon
2002	*Environmental Management Award*, Hispanic Scholarship Fund Institution.