John S. Connors

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Pleasant Hill, CA 94523

Education

M.S. in Computer Engineering, September 2007
University of California at Santa Cruz, Santa Cruz CA
Autonomous Systems Laboratory - Prof. Gabriel Elkaim

B.A. in Computer Science and Mathematics, December 2004
University of California at Berkeley, Berkeley CA

Employment

Associate Development Engineer, May 2008 - Present
C3UV - University of California, at Berkeley
Development of autonomous aircraft and management of research laboratory

Engineering Internship, April 2007 - December 2007
Wrightspeed Inc.
Modification of prototype electric supercar and business development

Graduate Student Researcher, September 2005 - September 2007
University of California, Santa Cruz
Autonomous vehicle research, path planning, vehicle control and design

Electrical Engineer, September 2002 - July 2005
CalSol - UC Berkeley Solar Vehicle Team
Design, manufacturing and testing of electrical systems, schematic design, PCB layout, project management, software integration

Engineer, October 2002 - May 2005
University of California, at Berkeley
Schematic design, PCB layout, project management, software integration, educational support

Design Consultant, April 2004 - November 2004
e-Lock Technologies, Inc.
Hardware debugging, design consultation, part recommendation, infrastructure integration

Conference Presentations

Institute of Navigation, Global Navigation Satellite Systems, Ft. Worth, TX, September 25-28, 2007

International Conference on Clean Electrical Power, Capri, Italy, May 21-23, 2007

65th Semi-Annual IEEE Vehicular Technology Conference, Dublin, Ireland, April 22-25, 2007

Institute of Navigation, National Technical Meeting, San Diego, CA, January 22-24, 2007

Publications

Connors, J., and Elkaim, G., *Trajectory Generation and Control Methodology for an Autonomous Ground Vehicle,* AIAA Guidance, Navigation and Control Conference (AIAA GNC 2008), Honolulu, HI, Aug. 18-21, 2008.
Connors, J., and Elkaim, G., *Experimental Results for Spline Based Obstacle Avoidance of an Off-Road Ground Vehicle,* Proceedings of the ION Global Navigation Satellite Systems Conference (ION-GNSS 2007), Fort Worth, TX, Sept. 25-28, 2007.

Connors, J., *On the Subject of Solar Vehicles and the Benefits of the Technology,* Proceedings of the International Conference on Clean Electrical Power (ICCEP 2007), Capri, Italy, May. 21-23, 2007.

Connors, J., and Elkaim, G., *Analysis of a Spline Based, Obstacle Avoiding Path Planning Algorithm,* 65th Semi-Annual IEEE Vehicular Technology Conference (VTC 2007), Dublin, Ireland, April 22-25, 2007.

Connors, J., and Elkaim, G., *Manipulating B-Spine Based Paths For Obstacle Avoidance In Autonomous Ground Vehicles,* Proceedings of the ION National Technical Meeting (ION-NTM 2007), San Diego, CA, Jan. 22-24, 2007.

Elkaim, G., Connors, J., and Nagel, J., *The Overbot: An Off-Road Autonomous Ground Vehicle Testbed,* Proceedings of the ION Global Navigation Satellite Systems Conference (ION-GNSS 2006), Fort Worth, TX, Sept. 22-24, 2006.

Connors, J., *Telemetric Development in Solar Vehicles with Synplify Pro Software*, The Syndicated, vol.5, no.1, pp. 1, 3-4, 2005.

Papers

John Connors, *Development, Analysis and Implementation of a Spline Based, Obstacle Avoiding, Path Planning Algorithm For Autonomous Ground Vehicles*, Master's Thesis, University of California, Santa Cruz, September, 2007.

Kunal Arya and John Connors, *Lightening Jack, A SlugFest 2006 Entry, Design and Construction*, Universtiry of Calfornia, Santa Cruz, March 2006.

John Connors and Noah A. Wilson, *Hardware Division Algorithm for the SCOORE Processor*, University of California, Santa Cruz, December 2005.

Hosted Events

Symposium On Electric Vehicles, *Organizer and Host*, University of California, Santa Cruz, March 10, 2007

Teaching Assistantships

Computer Engineering 118, Introduction to Mechatronics, UC Santa Cruz, Professor Gabriel Elkaim, Winter 2007

Computer Engineering 3, Personal Computer Concepts, UC Santa Cruz, Professor Cyrus Bazeghi, Spring 2006

Computer Engineering 12, Computing Systems and Assembly Language, UC Santa Cruz, Professor Cyrus Bazeghi, Winter 2006

Fellowships

School of Engineering Sponsored Graduate Student Researcher, Fall 2006

School of Engineering Sponsored Graduate Student Researcher, Summer 2006

Regents Fellowship, UC Santa Cruz, Fall 2005

Awards

Certificate of Achievement, May 2004
University of California, at Berkeley
For leadership in the Berkeley Solar Vehicle Team and contributions to the department

Second Place, July 2005
North American Solar Challenge 2005 (Stock Class)

Third Place, May 2005
Formula Sun Grand Prix 2005 (Stock Class)

Second Place, July 2003
American Solar Challenge 2003 (Stock Class)

First Place, May 2003
Formula Sun Grand Prix 2003 (Stock Class)

Commercials

Lexus RX 400h Hybrid SUV Commercial, Pahrump Nevada, August 2005

Printed Media

Fueling the Way, Gasoline Free, City on a Hill Press, Volume 41, Issue 20, March 14, 2007

Amped on Electric Cars: Electric Car Conference and Show at UCSC Draws Hundreds, Santa Cruz Sentinel, March 11, 2007

Out of this World, Adweek, September, 2005

Solar Vehicle Gets its Day in the Sun, The Daily Californian, August 8, 2005

Race Car Drivers Who Love the Sun, San Francisco Chronicle, July 16, 2005

UC Berkeley Students Rely on Sunshine to Get Their Kicks on Route 66, UC Berkeley News, July 14, 2003

The Speed of Light, Berkeley Engineering, June, 2003

Filmed Media	
	The Good, the Bad and the Slugly, KSBW Action News 8, March 17, 2006 *Behind the Wheel of a Solar Race Car*, MSNBC, August 5, 2005 *North American Solar Challenge*, NBC KXAN 36 Firstcast, July 16, 2005

References	
	Gabriel Elkaim, PhD Assistant Professor Computer Engineering UC Santa Cruz 1156 High Street, SOE3 Santa Cruz, CA 95064 Office: 831.459.3054 Fax: 831.459.4829 Ferenc Kovac ESG Manager 380 Cory Hall, M/S 1770 Department of Electrical Engineering and Computer Science Berkeley, CA 94720-1770 Office: 510.642.6952 Fax: 510.643.7162