

EDUCATION

- 2007- **Arizona State University** **Tempe, AZ**
- Pursuing Bachelors of Fine Arts in Sculpture
 - Expected graduation 2010
- 2004 **Arizona State University** **Tempe, AZ**
- 4.00/4.00 GPA
 - Completed one semester of Masters in Secondary Education program
 - Completed eight-week internship at Hamilton High School in Chandler, AZ
- 2000-04 **North Carolina State University** **Raleigh, NC**
- Degrees: 4.00/4.00 GPA; Physics (B.S.); Mathematics (B.S.); Chemistry (B.A.)
 - Honors Programs: General, Physics, Mathematics
 - Graduated Valedictorian in May 2004

WORK EXPERIENCE

- 2002- **Dartmouth College Brain Imaging Center** **Hanover, NH**
- RESEARCH ASSISTANT TO DR. PETER TSE (peter.u.tse@dartmouth.edu)
- Analyzed data from fMRI, EEG, and psychophysics experiments
 - Authored JScript scripts and a manual for automation of data analysis in BrainVoyager
- 2004- **Barrow Neurological Institute** **Phoenix, AZ**
- RESEARCH ASSISTANT TO DR. STEPHEN L. MACKNIK (macknik@neuralcorrelate.com) AND DR. SUSANA MARTINEZ-CONDE (smart@neuralcorrelate.com)
- Developed analysis for two-photon microscopy study of blood flow in the brain
 - Instructed lab members in fMRI and retinotopy analysis procedures
- 2007- **USDA, Arid Lands Agricultural Research Center** **Maricopa, AZ**
- BIOLOGICAL SCIENCE TECHNICIAN (SUPERVISOR: DR. DAVID DIERIG, david.dierig@ars.usda.gov)
- GS-5
 - Collected and analyzed data relating to breeding program of the oil-seed crop Lesquerella
- 2005- **National Geographic** **Sumatra, Indonesia**
- FIELD COORDINATOR (PROJECT LEADER: DR. PETER TSE, peter.u.tse@dartmouth.edu)
- Organized and carried out a camera-trapping research project in Indonesia
 - Goal of project is to produce first photographic documentation of a new species of ape
 - Featured on National Geographic Channel and in National Geographic Magazine
- 2006-07 **NYC Teaching Fellows** **New York, NY**
- DECEMBER 2006 TEACHING FELLOW (www.nyctf.org)
- Taught general science to 7th and 8th graders in inner-city Brooklyn
- 2004-05 **Glendale Union High School District** **Glendale, AZ**
- SUBSTITUTE TEACHER / MATH TUTOR
- Taught high school science and math
 - Tutored juniors and seniors in preparation for state math testing
- 2003 **Institute of Ophthalmology, University College London** **London, UK**

RESEARCH ASSISTANT TO DR. STEPHEN L. MACKNIK (macknik@neuralcorrelate.com)

- Developed procedures for retinotopic mapping and analysis of visual masking study
- Co-authored paper on visual awareness and masking

2001 **Research/Travel**

Various

- Studied scientific education in Nepal, Egypt, Austria, and Guatemala
- Received University Summer Enrichment Grant for \$4070

PUBLICATIONS

3. Troncoso, X. G., Tse, P. U., Macknik, S. L., Caplovitz, G. P., Hsieh, P.-J., Schlegel, A. A., Otero-Millan, J., Martinez-Conde, S. (2007). BOLD activation varies parametrically with corner angle throughout human retinotopic cortex. *Perception*, 36, 808-820.
2. Tse, P. U., Martinez-Conde, S., Schlegel, A., and Macknik, S. (2005). Visibility and visual masking of simple targets are confined to areas in the occipital cortex beyond human V1/V2. *Proceedings of the National Academy of Sciences*, 102, 47, 17178-17183.
1. Troncoso, X. T., P. U. Tse, S. L. Macknik, G. P. Caplovitz, P. J. Hsieh, A. A. Schlegel, S. Martinez-Conde. "fMRI correlates of corner-based illusions show that BOLD activation varies gradually with corner angle." Paper presented at the European Conference on Visual Perception, A Coruña, Spain, 23 August 2005.

EXTRACURRICULAR/COMMUNITY ACTIVITIES

2004-05 **International Rescue Committee**

Phoenix, AZ

REFUGEE ASSISTANCE PROGRAM (www.theirc.org)

- Assisted refugees while they adjusted to life in the U.S.
- Tutored students weekly in subjects including math, science, English, and history

2000-04 **CreARTivity**

Raleigh, NC

WEEKLY AFTER SCHOOL ARTS PROGRAM

- Co-founder, webmaster, and volunteer
- Taught weekly art classes for 20-30 students at low-income elementary and middle schools
- Arts Education Award from Raleigh United Arts Council and Chamber of Commerce

2003 **Park Scholarship Senior Retreat**

Yellowstone, WY

RETREAT TO YELLOWSTONE NATIONAL PARK

- Committee Chair
- Planned retreat for 64 people. Responsible for \$40,000 budget.

2000-02 **Student Honors Governing Board**

Raleigh, NC

NCSU UNIVERSITY HONORS PROGRAM'S STUDENT GOVERNMENT

- Co-founder, Chair

Second Violin – "Planck and the Constants" String Quintet (2000-03)

Staff Writer – Americana news & opinion publication (americana.ncsu.edu) (2000-02)

SKILLS

- **Computer:** MATLAB, Visual Basic, JScript, C++, Apache, PHP, Perl, MySQL, HTML, JavaScript, CSS, LaTeX, BrainVoyager, Maple, Adobe Flash, Adobe Photoshop, Solidworks, MS Word, MS Excel, MS PowerPoint, Linux, computer maintenance and assembly.
- **Language:** 3 yrs. Spanish (high school), 1+ yr. Indonesian (immersion)
- **Outdoor:** significant backpacking experience, including arid and jungle environments; extended experience planning and leading jungle expeditions of up to nine people and two weeks

