

# Chuan Shi

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<https://github.com/chuanshi>

## EDUCATION

<i>Ph.D., Chemical Engineering</i>	September 2010 - October 2015
Stanford University, Stanford, CA	
<i>B.S., Chemical Engineering</i>	August 2007 - May 2010
The University of Texas at Austin, Austin, TX	

## TECHNOLOGY SKILLS

*Programming Languages:* Proficient: Python. Familiar: Lua, JavaScript, SQL, C, MATLAB, Bash.  
*Software:* GNU/Linux, Git, Vim, Emacs, L<sup>A</sup>T<sub>E</sub>X, Pandas, Flask, SQLAlchemy

## EXPERIENCE

<i>Postdoctoral Scholar</i>	October 2015 - April 2016
SUNCAT Center for Interface Science and Catalysis	
Stanford University, Stanford, CA	

- Expanded continuous integration testing of CatMAP open source project to encompass all previously-undocumented features. <https://github.com/chuanshi/catmap>
- Mentored graduate students by helping them implement new features in CatMAP and ase-espresso

<i>Research Assistant</i>	March 2011 - October 2015
SUNCAT Center for Interface Science and Catalysis	

- Performed density functional theory calculations using our supercomputing cluster at SLAC to better understand electrochemical CO<sub>2</sub> reduction
- Analyzed and performed tens of thousands of calculations through Python and Bash scripting.
- Published 6 peer-reviewed journal articles on CO<sub>2</sub> reduction.

## PERSONAL PROJECTS

<i>sgre, Programmer</i>	July 2012 - Present
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- When English servers of this Flash-based Korean online card game shut down, a team of fans recreated the game as an open source project. <https://github.com/chuanshi/sgre>
- Responsible for some card implementations, background music, user interface, server, and Flash client reverse engineering on a small team of contributors.
- 16,000 registered accounts and 100 monthly active players at swordgirls.net

SaltyELO, October 2013

- Project to automatically retrieve and store match data for saltybet.com [https://github.com/chuanshi/salty\\_elo](https://github.com/chuanshi/salty_elo)
- Capture streaming video data, process images, OCR text, and maintain a database of fighters and their calculated strength automatically. Successfully identifying over 90% of fighters.

## Other Accomplishments

2010 World Series of Poker Event #47 - 4th Place