Debnil Arindam Sur

CONTACT INFORMATION	73 Carl St San Francisco, CA 94117 USA	*Phone:* (408) 667-7663 *Email:* debnil@cs.stanford.edu

RESEARCH INTERESTS

Applied machine learning, computational biophysics, computational social science, software engineering

EDUCATION

Stanford University, Stanford, California USA

M.S., Computer Science, June 2018
- Advisors: Alex Aiken, Vijay S. Pande

B.S., Computer Science, June 2017
- Advisor: Mykel J. Kochenderfer

ACADEMIC EXPERIENCE

Stanford University, Stanford, California USA

Researcher   **May 2017 - Aug 2018**
Implemented deep learning algorithms for protein-ligand binding affinity prediction and small-molecule force field design. PI: Vijay S. Pande.

Researcher   **Jun 2018 - Aug 2018**
Implemented weak supervision-based, natural language processing pipeline to find outliers in California parole hearings. PI: Nick McKeown.

Graduate Research Assistant   **Jan 2018 - Jun 2018**
Created static and dynamic analysis tools to help novice programmers with the Legion programming system and its Regent language. PI: Alex Aiken.

Graduate Student Tutor   **Mar 2018 - Jun 2018**
Individually assisted students in CS 231N: Convolutional Neural Networks for Visual Recognition.

Research Assistant   **Jul 2016 - Sep 2016**
Collected data and created infrastructure for large-scale detection of protests on Chinese social media. PIs: Jennifer Pan & John C. Duchi.

University of Edinburgh, Edinburgh, Scotland UK

Visiting Researcher   **Jun 2016 - Jul 2016**
Studied computational sociolinguistics of political behavior on Scottish Twitter. PI: Sharon Goldwater.

PUBLICATIONS

Feinberg, E.N., **Sur, D.**, Wu, Z., Husic, B.E., Mai, H., Li, Y., Sun, S., Yang, J., Ramsundar, B. and Pande, V.S., 2018. PotentialNet for Molecular Property Prediction. *ACS Central Science*.

Shoemark, P., **Sur, D.**, Shrimpton, L., Murray, I. and Goldwater, S., 2017. Aye or naw, whit dae ye hink? Scottish independence and linguistic identity on social media. In *Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics: Volume 1, Long Papers (Vol. 1, pp. 1239-1248)*.

CONFERENCE PRESENTATIONS

Sur, D., Guhathakurta, P. and Toloba, E., 2013, January. Properties of Dwarf Ellipticals in Low-Density Environments. In *American Astronomical Society Meeting Abstracts #221 (Vol. 221)*.

PROFESSIONAL EXPERIENCE	**Interstellar**, San Francisco, California USA

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Software Engineer, Research — **Sep 2018 - Pres.**
Implementing the systems side of Starlight, the adaptation of the Lightning Network on the Stellar Network.

Facebook, Menlo Park, California USA

Software Engineering Intern, Applied Machine Learning — **Sep 2017 - Dec 2017**
Implemented, benchmarked, and deployed deep learning models for text correction for dyslexic users.

Rubrik, Palo Alto, California USA

Member of the Technical Staff Intern, Distributed Filesystem — **Jun 2017 - Sep 2017**
Integrated cloud object stores into distributed file system.

Salesforce, San Francisco, California USA

Software Engineering Intern, Communities Cloud — **Jun 2015 - Sep 2015**
Implemented and tested Reputation Leaderboard on Chatter.

HONORS AND AWARDS

Student Speaker, 126th Opening Convocation, Stanford University, 2016

Public Service Honors Society, Stanford University, 2016

Volunteer of the Year, Silicon Valley Urban Debate League, 2015 & 2016

National Merit Scholar, 2013

4th Speaker and 7th Team, Policy Debate, National Forensic League Nationals, 2013

1st Place, Policy Debate, California State Championships, 2013

Semifinalist, Intel Science Talent Search, 2012

Semifinalist, Siemens Competition, 2012

4th Place, US Extemporaneous Speaking, National Forensic League Nationals, 2012

Eagle Scout, BSA Troop 466 (Sunnyvale, CA), 2012

National AP Scholar, 2011

EXTRACURRICULAR ACTIVITIES

ASSU Constitutional Council, Stanford, California USA

Councilperson — **Sep 2016 - Jun 2018**
Served on the five-person judicial arm of Stanford's student government.

CS + Social Good, Stanford, California USA

Discussions Lead, Founding Team — **Sep 2015 - Jun 2017**
Founding team for Stanford's first organization dedicated to CS and Social Good. Led Discussions Team: organized conversations and speaker events and created a class (CS 53). Helped create a two-quarter Studio program for students to undertake social good projects with community partners.

Stanford Youth Debate Initiative, Stanford, California USA

Founder, President — **Apr 2014 - Jun 2017**
With the Silicon Valley Urban Debate League, established debate programs at four low-income Bay Area high schools. Created curricula, led weekly practices, and judged tournaments.