

Daniel Cheng

14381 Hibiscus Drive, Westminster, CA 92683 USA
714-274-5096 (tel.) dlcheng@uci.edu

Interests and Objectives

Remote Sensing and Computer Vision

Experience with computer vision neural network architecture design, training, evaluation, and validation.

Interests automatic glacial calving front tracking, land cover classification and feature extraction.

Scientific Computing

Interests in remote sensing data processing and assimilation, applied computational vision, and cryospheric modeling of ice sheets and oceans.

Education

PhD, Computer Science, University of California, Irvine, USA	2019-2021
M.S, Computer Science, University of California, Irvine, USA	2017-2019
B.S., Computer Science and Engineering, University of California, Irvine	2013-2017

Honors/Awards

2019 NSF Graduate Research Fellowship Program, Honorable Mention

Recent Publications

Goliber, S., Black, T., Catania, G., Lea, J., Olsen, H., **Cheng, D.**, Bevan, S., Bjørk, A., Bunce, C., Carr, R., Cowton, T., Gardner, A., Fahrner, D., Hill, E., Joughin, I., Korsgaard, N., Moon, T., Murray, T., Sole, A., Wood, M., Zhang, E. (2022). TermPicks : Terminus traces for the Greenland Ice Sheet for use as training data, *The Cryosphere*, in review.

Cheng, G., Morlighem, M., Mougnot, J., & **Cheng, D.** (2022). Helheim Glacier's terminus position controls its seasonal and inter-annual ice flow variability. *Geophysical Research Letters*, 49, e2021GL097085. <https://doi.org/10.1029/2021GL097085>

Cheng, D., Hayes, W., Larour, E., Mohajerani, Y., Wood, M., Velicogna, I., and Rignot, E. (2021). Calving Front Machine (CALFIN): Glacial Termini Dataset and Automated Deep Learning Extraction Method for Greenland, 1972-2019, *The Cryosphere*, <https://doi.org/10.5194/tc-2020-231>.

Larour, E., **Cheng, D.**, Perez, G., Quinn, J., Morlighem, M., Duong, B., Nguyen, L., Petrie, K., Harounian, S., Halkides, D., and Hayes, W. (2017). A JavaScript API for the Ice Sheet System Model (ISSM) 4.11: towards an online interactive model for the cryosphere community, *Geosci. Model Dev.*, 10, 4393-4403, <https://doi.org/10.5194/gmd-10-4393-2017>.