

# Ewin Tang

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- EDUCATION**
- University of Washington** 2018 – Present  
*PhD* in Computer Science
- University of Texas at Austin** 2014 – 2018  
*Bachelor of Science* in Computer Science  
*Bachelor of Science* in Pure Mathematics  
Thesis: A quantum-inspired classical algorithm for recommendation systems  
Advisor: Scott Aaronson
- PREPRINTS**
- András Gilyén, Seth Lloyd, and Ewin Tang. “Quantum-inspired low-rank stochastic regression with logarithmic dependence on the dimension”. In: *arXiv* (2018). arXiv: 1811.04909 [cs.DS].
- Ewin Tang. “Quantum-inspired classical algorithms for principal component analysis and supervised clustering [note]”. In: *arXiv* (2018). arXiv: 1811.00414 [cs.IR].
- Sunita Chepuri, Neeraja Kulkarni, Joseph Suk, and Ewin Tang. “Factorizations of  $k$ -nonnegative matrices”. In: *arXiv* (2017). arXiv: 1710.10867 [math.CO].
- PUBLICATIONS**
- Ewin Tang. “A quantum-inspired classical algorithm for recommendation systems”. In: *STOC*. 2019. arXiv: 1807.04271 [cs.IR].
- David W Baker et al. “Development of optical probes for in vivo imaging of polarized macrophages during foreign body reactions”. In: *Acta Biomaterialia* 10.7 (2014), pp. 2945–2955.
- Ewin Tang et al. “In vivo imaging of infection using a bacteria-targeting optical nanoprobe”. In: *Journal of Biomedical Nanotechnology* 10.5 (2014), pp. 856–863.
- Yi-Ting Tsai et al. “Optical imaging of fibrin deposition to elucidate participation of mast cells in foreign body responses”. In: *Biomaterials* 35.7 (2014), pp. 2089–2096.
- Jun Zhou et al. “Real-time detection of implant-associated neutrophil responses using a formyl peptide receptor-targeting NIR nanoprobe”. In: *International Journal of Nanomedicine* 7 (2012), p. 2057.
- INVITED TALKS**
- Talks surveying quantum-inspired classical linear algebra algorithms:
- TQC (plenary talk) *June 2019*
  - CIFAR Quantum Information Systems Meeting *May 2019*
  - Microsoft Research QuArC seminar *November 2018*
- “Quantum-inspired classical linear algebra algorithms” [GLT18], TCS+ *May 2019*
- “A quantum-inspired classical algorithm for recommendation systems” [Tan19]
- Microsoft Research AI seminar *December 2018*
  - UW Theory Seminar *October 2018*
  - Quantum Cluster, Simons Institute (informal) *June 2018*
- RECOGNITION**
- NSF Graduate Research Fellowship recipient** 2019
- Forbes 30 Under 30 2019**
- Dean’s Honored Graduate** 2018  
Research and academic distinction given to the top 1% of graduating students of UT College of Natural Sciences