Yining (Nick) Feng

CONTACT INFORMATION	154 Adelphi St. Apt. 7 Brooklyn, NY 11205 USA	607-761-3571 yf889@nyu.edu

EDUCATION

Tandon School of Engineering, New York University

Ph.D. in Electrical Engineering, From May 2018
- Advisor: Prof. Ivan Selesnick, Prof. Debra Laefer

M.S. in Electrical Engineering, December 2016
- Thesis Topic: Multi-Scale Overlapping Sparse Low-Rank Matrix Estimation
- Advisor: Prof. Ivan Selesnick

Binghamton University, State University of New York

M.B.A. in Finance, December 2014

B.S. in Electrical Engineering, May 2013
- Cum Laude, Tau Beta Pi Engineering Society

PUBLICATIONS

Y. Feng, B. Ding, H. Graber, and I. Selesnick, *Transient Artifacts Suppression in Time Series via Convex Analysis,* Springer Nature, Emerging Trends in Signal Processing in Medicine and Biology (2019).

Y. Feng, H. Graber, and I. Selesnick, *The Suppression of Transient Artifacts in Time Series via Convex Analysis,* IEEE Signal Processing in Medicine and Biology Symposium (2018).

S. Wang, I. Selesnick, G. Cai, **Y. Feng**, X. Sui, and X. Chen, *Nonconvex Sparse Regularization and Convex Optimization for Bearing Fault Diagnosis,* IEEE Transactions on Industrial Electronics, 65, (2018), no. 9, 7332-7342.

RESEARCH PROJECTS

7.2018 – Present @ NYU	**Non-Convex Optimization Landscape Design** PI: Prof. Ivan Selesnick, ECE.	
7.2018 – Present @ NYU	**Tight Convex Norm Design for Sparse + Piecewise Constant Signals** PI: Prof. Ivan Selesnick, ECE.	
3.2018 – Present @ NYU	**Generalized Fused Lasso via Convex Analysis** Application: Transient Artifact Suppression, Sleep Spindle Detection and Amplitude & Phase Shift-Keying. PI: Prof. Ivan Selesnick, ECE.	
2.2017 – Present @ NYU	**Full Waveform LiDAR Processing** (NSF OAC1940145) Application: LiDAR Point Cloud Denoising with Directional Total Least Square. PIs: Prof. Debra Laefer, Center for Urban Science and Progress Prof. Ivan Selesnick, ECE.	
12.2018 – 6.2019 @ NYU	**Majorization Minimization via Generalized Moreau Envelope** PIs: Prof. Ivan Selesnick, ECE. Prof. Azita Mayeli, Math & CS, CUNY.	

	5.2016 – 12.2016 @ NYU	**Multi-Scale Overlapping Sparse Low-Rank Matrix Estimation** PI: Prof. Ivan Selesnick, ECE.
	1.2016 – 4.2016 @ NYU	**Sparse Diagonally-Oriented DCT-like 2D Dictionary** PI: Prof. Ivan Selesnick, ECE.
TEACHING	9.2018 – 12.2018 @ NYU	Teaching Assistant for *Digital Signal Processing*. Instructor: Prof. Thomas Marzetta, ECE. Prof. Yao Wang, ECE.
SERVICE	5.2019 – Present	Union Steward for *Graduate Student Organizing Committee*.
	2.2019 – Present	Reviewer for *Journal of Photogrammetry and Remote Sensing*.
	8.2019 – 9.2019	Reviewer for *IEEE Signal Processing in Medicine and Biology Symposium 2019*.
	1.2019 – 2.2019	Reviewer for *International Conference on Acoustics, Speech, and Signal Processing 2019*.
OTHERS	Research Interests:	Convex Analysis, Non-convex Optimization, Numerical and Fast Algorithm, Sparse Signal Models and Optimization, Image and Medical Image Processing.
	Languages:	English, Mandarin
	Coding:	Matlab (proficient), Python

REFERENCES   **Ivan Selesnick**, Professor, Tandon School of Engineering, New York University, 646-997-3416, `selesi@nyu.edu`

Debra Laefer, Professor, Center for Urban Science and Progress, New York University, 929-248-2706, `debra.laefer@nyu.edu`

Azita Mayeli, Professor, Math and Computer Science Department, City University of New York, 516-423-4788, `amayeli@gc.cuny.edu`