

# Nicholas Heller

## Curriculum Vitae

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### Research Interests

Active learning, semi-supervised learning, computer vision, medical image processing.

### Education

- 2013–2017 **B.S. Computer Science**, *University of Minnesota – Twin Cities*.  
2017–Present **Ph.D. Computer Science & Engineering**, *University of Minnesota – Twin Cities*.  
**Advisor:** Nikolaos Papanikolopoulos

### Publications

- 2018 *Imperfect Segmentation Labels: How Much Do They Matter?*.  
**Nicholas Heller**, Joshua Dean, and Nikolaos Papanikolopoulos  
Oral Presentation, MICCAI LABELS Workshop, 2018
- 2018 *A Balance Cascade of Deep Neural Networks for CT Renal Segmentation*.  
**Nicholas Heller**, Michael Tradewell, Joshua Dean, Vassilios Morellas, Nikolaos Papanikolopoulos, Niranjana Sathianathan, and Christopher Weight  
Poster, Annual Meeting of the Engineering & Urology Society
- 2018 *Convolutional Neural Networks for Aircraft Noise Monitoring*.  
**Nicholas Heller**, Derek Anderson, Matt Baker, Brad Juffer, Nikolaos Papanikolopoulos  
Technical Report
- 2017 *A Web-Based Platform for Distributed Annotation of Computerized Tomography Scans*.  
**Nicholas Heller**, Panagiotis Stanitsas, Vassilios Morellas, Nikolaos Papanikolopoulos  
Poster, MICCAI LABELS Workshop, 2017

### Service

- Reviewer MICCAI LABELS Workshop 2018, Annual Meeting of the Engineering and Urology Society 2018.

### Teaching

- Spring 2018 CSCI 2033, Elementary Computational Linear Algebra, *Head TA, Guest Lecturer*.  
Fall 2017 CSCI 5511, Artificial Intelligence 1, *Head TA, Guest Lecturer*.

## Graduate Coursework

- In Progress Error-correcting Codes Finite Fields and Algebraic Curves, Introduction to Data Mining, Programming Languages.
- Completed Computational Aspects of Matrix Theory, Theory of Probability and Statistics, Introduction to Machine Learning, Analysis of Numerical Algorithms, Introduction to Research in Computer Science, Colloquium.

## References

### **Nikolaos Papanikolopoulos**

Distinguished McKnight Presidential  
Endowed Professor  
Computer Science and Engineering  
University of Minnesota – Twin Cities

### **Victoria Interrante**

Professor  
Computer Science and Engineering  
University of Minnesota – Twin Cities

### **Marvin Marshak**

Distinguished Professor  
Physics  
University of Minnesota – Twin Cities

### **Christopher Weight**

Assistant Professor  
Urologic Surgery  
University of Minnesota – Twin Cities