

# Filip Aleksandar Jankovic

filipj@umich.edu • (248) 703-5340 • filipj.com • linkedin.com/in/fjankovic/

## EXPERIENCE

### School of Information, University of Michigan

*Ann Arbor, MI*

#### Research Assistant / Data Science Course Coordinator

*June 2016 – Present*

- Created course content, lectures, coding assignments, and programmed assignment autograders and learning tools in python for the [Applied Data Science with Python Specialization](#) on Coursera which consists of the following courses:
  - Introduction to Data Science in Python
  - Applied Machine Learning in Python
  - Applied Plotting, Charting, & Data Representation in Python
  - Applied Text Mining in Python
  - Applied Social Network Analysis in Python
- The specialization has over 200,000 enrolled learners since launching October 2016.
- Instructed learners in [interactive coding videos](#) as an assistant lecturer.
- Researched and proposed curricular improvements.
- Interacted with learners from around the world, providing clarity and answers to course questions.

### Industrial and Operations Engineering (IOE) Department, University of Michigan

*Ann Arbor, MI*

#### Graduate Student Instructor, IOE 424 Practicum in Production & Service Systems (Senior Design)

*2015 – 2016*

- Advised students working with organizations on engineering projects from network modeling to sentiment analysis.

#### Research Assistant

*2015 – 2016*

- Used linear programming to model neonatal nurse practitioner workforce to identify policy towards self-sufficiency.

#### Diversity Initiative Event Planner & Student Ambassador

*2013 – 2016*

- Organized and planned guest speaker seminars, luncheons, and dinners, and reached out to prospective students.

#### Research Intern

*Summer – Fall 2013*

- Simulated Risk-Sensitive Hypertension Treatment Decisions for Coronary Heart Disease Management using Matlab.
- Used parallel computing to speed up simulations from 1 month to 2 days by distributing the work across the university's high performance computing cluster.

### Unilever

*Baltimore, MD*

#### Summer Intern

*Summer 2014*

- Led a project to create a lockout labeling standard for the Unilever Baltimore Plant's electrical equipment.

## SKILLS

- Data Analysis, Statistical Inference, Data Visualization, Machine Learning in Python, R, Matlab, Tableau
- Python (NumPy, pandas, matplotlib, scikit-learn, NLTK, NetworkX, TensorFlow, Keras)
- SQL, PostgreSQL, AWS, Google BigQuery, Spark
- Unix, Linux, Git
- Jupyter Notebooks, PyCharm
- Linear Programming, Constraint Programming, Optimization Modeling, AMPL, OPL Studio
- Time Series Analysis
- Design of Experiments
- Experience with C++, Minitab, Analytica, SAS, STATA

## MEMBER OF

### Data Team at the Digital Education and Innovation Lab (Office of Academic Innovation)

*August 2016 – Present*

- Created a dashboard which allows instructors and course designers to visualize MOOC survey data from the University of Michigan's Coursera and EdX courses.

### Michigan Data Science Team (MDST)

*2015 – 2016*

- Created visualizations and predictive models to help understand the Flint, MI water crisis.
- Created a model to predict blight ticket compliance in Detroit, MI.

## PUBLICATIONS

- G. Schell, M. Lavieri, F. Jankovic, X. Li, A. Toriello, K. Martyn, & G. Freed. Strategic Modeling of the Neonatal Nurse Practitioner Workforce. Nursing Outlook. 2016.
- G. Schell, M. Lavieri, F. Jankovic, W. Wiitala, J. Sussman, & R. Hayward. Parameterization of Simulation to Compare Hypertension Treatment Policies. Proc. 8th INFORMS Workshop on Data Mining and Health Informatics. 2013.

## EDUCATION

### University of Michigan

*Ann Arbor, MI*

MSE in Industrial and Operations Engineering (GPA: 3.75)

*May 2016*

BSE in Industrial and Operations Engineering (GPA: 3.49)

*May 2015*