# Filip Aleksandar Jankovic

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#### **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 <u>Applied Data Science with Python Specialization</u> on Coursera which consists of the following courses:
  - Introduction to Data Science in Python
  - Applied Plotting, Charting, & Data Representation in Python

- Applied Machine Learning in Python
- Applied Text Mining in Python
- Applied Social Network Analysis in Python
- The specialization has over 100,000 enrolled learners since launching October 2016.
- Instructed learners in <u>interactive coding videos</u> 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