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 <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