Ryan Kohls

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Online Portfolio: https://portfolium.com/rkohls/portfolio

Education

California Polytechnic State University, San Luis Obispo   Graduation: June 2019
Bachelor of Science in Industrial Engineering   GPA: 3.59/4.00

Work Experience

California Polytechnic State University   June 2017-September 2017
Research Assistant (15 hours per week)
- Awarded Funding to study the use of UAVs equipped with RFID interrogators for autonomous livestock tracking
- Two papers are currently in review for publication in the IEEE IOT journal and the International Journal of Production Economics
- Optimized drone routing by comparing and implementing various travelling salesman heuristics in Python
- Researched the use of machine learning algorithms for vehicle routing problems

Ernie Ball   March 2017-Present
Manufacturing Engineering Intern (18 hrs. during the schoolyear, 40 hrs. during Summer)
- Assisted with implementing an autonomous cellular manufacturing system to allow for 24/7 production
- Applied RFID systems, robotic arms, and CNC mills to increase product quality
- Implemented various lean manufacturing concepts such as one-piece flow

Projects and Skills

Data Analytics-Exploratory data analysis of large data sets and non-parametric modelling as part of a graduate-level class in applied statistics

Python, R, MATLAB, and SQL-Developed a genetic algorithm for solving a variant of the prize collecting travelling salesman problem and experience with neural networks, polynomial and logistic regression, and data analytics

Operations Research -Created a program for solving scheduling problems such as assignment of professors to classes based on teaching experience and time availability

Boeing Engineering Accelerated Mentorship Program-Competed in engineering challenges at Boeing and presented a project to senior Boeing engineers on the use of RFID to improve luggage tracking

Leadership and Involvement

Engineering Supervisor -Coached 3 industrial engineering teams each doing process improvement projects with local companies and led activities teaching lean manufacturing topics such as time studies, work sampling, and learning curve

EOP Center Tutor -Tutored students in introductory physics classes

PolySat -Worked in a research lab focused on the design of small satellites (CubeSats)