# MARIO WIJAYA

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### **EDUCATION**

## **GEORGIA INSTITUTE OF TECHNOLOGY**

Atlanta, GA

Master of Science in Analytics

May 2018

• Relevant Coursework: Data & Visual Analytics, Machine Learning, Computational Methods, Information Visualization

GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

Bachelor of Industrial & Systems Engineering (Operations Research) - Highest Honor

May 2017

Relevant Coursework: Data Input/Manipulation, Stochastic System, Simulation, Deterministic Optimization

### **SKILLS**

**Programming/Software/Database:** D3, JavaScript, Python, R, Gephi, Matlab, Arena, Simio, MiniTab, SQL, Tableau, Qlikview, MongoDB

Basic Level: Java, C, Spark, Hadoop - MapReduce, Pig, AWS, Microsoft Azure, Node.js, React.js, Xpress, Cplex
 Analytical Techniques: Clustering, Forecasting, Machine Learning, Optimization, Regression, Simulation, Stochastics

### **EXPERIENCE**

#### VERTAEON

Atlanta, GA

### Developer/Analyst

Dec 2017 - Présent

- Developed an application using Node.js to automate data retrieval through API call for clients used for analysis
- Created 2 Python scripts to automate data filtering process and output the information based on user's input

#### SUNTRUST BANKS INC.

Atlanta, GA

**Business Analyst** 

Jun 2017 - Aug 2017

- Data mined using Python script to support sustainability strategies to reduce 2% of air travel annually by equipping audio devices to employees, shift 5% of the domestic flights to a carbon efficient airline, and convert default rental car option to economy resulting in reduction of 1.9M lbs. of CO₂ and \$1.2M savings over span of 5 years
  ▶ Resulting Award: Winner of 2017 GT Carbon-Reduction Challenge (selected from among 10 teams)
- Reverse engineered Operational Loss dashboard by mapping the underlying code of the dashboard to the databases that provide summary of operational losses and forecast data of the bank transactions
- Optimized Operational Loss dashboard with 2 additional COGNOS reports and redesigned user interface, while considering client's needs and usability

## W. L. GORE & ASSOCIATES INC.

Flagstaff, AZ

# **Operations Analyst**

May 2016 - Aug 2016

- Devised a time-based load shipment frequency proposal to maximize usage of a sterilization chamber generating in annual savings of \$220K in sterilization cost
- Developed a plan to level load shipment frequency to decrease the overcapacity of a sterilization chamber resulting in annual savings of \$66K in sterilization cost
- Achieved \$27K reduction in annual transportation spending by optimizing shipping practices
- Relocated consolidation point and adjusted routing schedule decreasing lead time by a day

## ACADEMIC EXPERIENCE

### GEORGIA INSTITUTE OF TECHNOLOGY

Atlanta, GA

Graduate Teaching Assistant - Information Visualization (CS4460)

Jan 2018 - Present

- Teach visualization and programming concepts using d3. is to 120+ students during lab session each Friday
- Provides students with one-on-one visualization and programming tutoring during office hours

## **GEORGIA INSTITUTE OF TECHNOLOGY**

Atlanta, GA

Material Analytics Research

Jan 2016 - May 2016

- Utilized statistical modeling to model material process and minimize real-life experimentation costs
- Used model to facilitate the decision of process conditions for getting materials with certain properties
- Created a predictive model using big data analytics tools to optimize material designs and facilitate decision

#### **PROJECTS**

- MovieHunt Created an interactive visualization system to help users find the next movies to watch. D3, iQuery
- DisFood Improving chronic disease control via food pantries using machine learning & visualization. D3. Python
- Wine Quality Modeled wine quality using classification algorithms to predict whether a given wine is good/bad quality and regression to estimate wine quality using machine learning approach. Python, R
- **Predicting S&P 500 Moving Average** Developed Support Vector Machine model with Stochastic Gradient Descent to predict leading/trailing of stocks with 80% accuracy and beat Scikit-learn accuracy by 5%. *Python*
- Ticket Management System Developed a Graphical User Interface application to manage train tickets systems. Designed the database and its tables by creating Informational Flow, Relational Schema, and Enhanced Entity Relationship Diagrams. Python, MySQL, SQL

# **ADDITIONAL INFORMATION**

**Leadership:** President of Georgia Tech Badminton Club (2016-2017), Treasurer of Georgia Tech Badminton Club **Languages:** English, Chinese Taiwanese, Chinese Mandarin, Bahasa Indonesia, Standard Malay

Club/Activities: Badminton Club at GT, Data Science at GT / Reading, Running, Watching Movies and Hiking