John Kitaoka

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Technical Skills

Languages: Python, Java, SQL, C   **Tools**: Django, Jupyter, MySQL, matplotlib, jQuery, scikit-learn

Education

- **University of Wisconsin-Madison**   Madison, Wisconsin
  B.S., Computer Science, B.B.A., Finance, B.B.A., Information Systems   *GPA: 4.0/4.0; May 2021*
    - **Extracurriculars**: UW-Madison Men's Water Polo; Association for Computing Machinery, Student Chapter; Capital Management Club; MadHacks

Experience

- **University of Wisconsin-Madison**   Madison, Wisconsin
  Teaching Assistant   *Aug. 2019 - Present*
    - Held office hours and labs for CS301 - Data Programming I
    - Utilized Google Forms API to develop partner-matching algorithm

- **University of Wisconsin-Madison**   Madison, Wisconsin
  Data Science Research Assistant   *May 2019 - Present*
    - Worked under SCDIS in collaboration with the city of Madison, Wisconsin, for research on existing multi-million dollar traffic engineering budget and proposed BRT transit system
    - Optimized proposed traffic routing in downtown Madison with scikit-learn learning models and matplotlib visualization, case analysis of user density through regression and k-means clustering
    - Technologies Used: Java, SQL, scikit-learn, matplotlib, Pandas

- **Geotek, Inc.**   Stewartville, Minnesota
  Data Analytics Intern   *May 2019 - Aug. 2019*
    - Developed metrics calculation software to analyze factory production and efficiency, real-time generation and retrieval of expense reports from SQL databases with Python and batch scripting
    - Built internal site using Bootstrap jQuery, Ajax libraries hosted through company servers
    - Technologies Used: Python, SQL, Visual Basic, jQuery, JavaScript

Projects

- **Jetpack Joyride Neuro-Evolutionary AI**
  Personal Project   *Sep. 2019*
    - Generated neural network to learn to play Python implementation of popular mobile game via reinforced learning
    - Tanh-based fitness function to determine weights on character actions for multiple genomes per generation in accelerating randomly-generated environment
    - Activation algorithm to apply genome fitness weight towards movements and strategies to survive as long as possible, favorable strategies passed down to next generation

- **Django Stock Market Viewer**
  Personal Project   *Aug. 2019*
    - JavaScript, SQLite with Django framework to search and track real-time share prices on NYSE
    - Ticker search algorithm, customizable home page for individual user accounts

- **VAC-Calculation Algorithm**
  Intern Project, Geotek, Inc.   *Jul. 2019*
    - Dynamic search algorithm designed to handle high volume calculations of product expenses to fit a customization-based sales model
    - Efficient parsing of remote SQL databases, interfaced file inputs to a Tkinter GUI for greater accessibility
    - Currently used to track company expenses, providing real-time costs to improve overall expense accuracy by 35.6%