John Kitaoka

jkitaoka@wisc.edu — johnkitaoka.com — linkedin.com/in/johnkitaoka

Technical Skills

Languages: Python, Java, SQL, HTML, CSS **Tools**: Django, Jupyter, MySQL, Pandas, LaTeX

Education

- **University of Wisconsin-Madison** Madison, Wisconsin
  B.S., Computer Science, B.B.A., Accounting *GPA: 4.0/4.0; Sept 2018 - May 2021*
  - **Extracurriculars**: UW-Madison Men's Water Polo; Association for Computing Machinery, Student Chapter; Capital Management Club; MadHacks

Experience

- **Teaching Assistant** Madison, Wisconsin
  University of Wisconsin-Madison, Department of Computer Science *Aug. 2019 - Present*
  - Led help sessions and labs for CS301 - Data Programming I
  - Utilized Google Forms API to develop partner-matching algorithm
- **Data Science Research Assistant** Madison, Wisconsin
  University of Wisconsin-Madison, Department of Computer Science *May 2019 - Present*
  - Worked in Data Science Labs in collaboration with the city of Madison, Wisconsin, for research on existing traffic engineering budget valued at over six million dollars
  - Analyzed statistics on stoplight location in downtown Madison to be used to justify millions of dollars in transportation infrastructure cost allocation
  - Produced reports and visuals for city officials to use in the annual city budget hearing for 2020/2021 fiscal year
  - Technologies Used: Python, SQL, Pandas, LaTeX, Jupyter, Git
- **Data Analytics Intern** Stewartville, Minnesota
  Geotek, Inc. *May 2019 - Aug. 2019*
  - Developed automated metrics calculation software to measure factory production and efficiency, reducing company data storage by 21%
  - Created a Python calculation algorithm that outperformed an third-party development firm, eliminating the need for third-party software expenses worth thousands of dollars
  - Built internal site using Bootstrap 4 HTML/CSS and jQuery libraries hosted through company servers
  - Technologies Used: Python, SQL, HTML, CSS, Visual Basic

Projects

- **Jetpack Joyride Neuro-Evolutionary AI**
  Personal Project *Sep. 2019*
  - Utilized NEAT-Python to generate an evolving arbitrary neural network to learn to play Jetpack Joyride
  - Tanh-based fitness functions simulates random character actions for twenty genomes per generation in accelerating randomly-generated environment
  - Activation function to apply fitness data towards movements and strategies to survive as long as possible, with pickle implementation to pass down favorable genomes
- **VAC-Calculation Algorithm**
  Intern Project, Geotek, LLC *Jul. 2019*
  - Recursive search tree algorithm designed to calculate an accurate price of labor to fit a customization-based sales model for a manufacturing company
  - Efficient parsing of remote SQL databases, and drag-and-drop file inputs to a Tkinter GUI for greater accessibility
  - Currently used to track company expenses, providing exact costs to improve overall expense accuracy by 35.6%