Valentine Wilson

Skills: Python (NumPy, OpenCV, TensorFlow, scikit-learn, Matplotlib, Beautiful Soup, Gephi), R (Shiny, ggplot), SSPS, JavaScript (jQuery, D3, Waypoints, ScrollStory, Chart.js), HTML/CSS, SQL, Java, Tableau

Coursework: Data Visualization, User-Interface Design, Machine Learning, Research Methods and Analysis, Linear Algebra, Probability and Statistics, Social Psychology, Cognitive Science, Microeconomics

WORK EXPERIENCE

The Hudson Institute

May 2019 – August 2019

Technology and Policy Research Intern

Washington, DC

- Assisted scholars in research and analysis of 5G networks, the United States-China trade war, and quantum encryption.
- Staffed events on Capitol Hill: checked-in guests, distributed programs, and helped facilitate Q&A sessions.

Draper Laboratory

May 2018 - August 2018

Machine Intelligence Intern

Cambridge, MA

- Created targeted and non-targeted adversarial attacks on deep neural networks.
- Visualized social graphs of company employees using Gephi to find clusters of people with similar skill sets.

Institut Pasteur

June 2017 – August 2017

Data Visualization Intern

Paris, France

- Created a web app which visualizes gene expression data over time with a variable number of donors using R and Shiny.
- Integrated dimensionality reduction (PCA, t-SNE) and scree plots as data-preprocessing options.

PROJECTS

Typography Phylogenetic Tree

May 2020

- Used a combination of Beautiful Soup and manual scraping to create a spreadsheet of aesthetic movements and relationships between typefaces from the early Renaissance through the Information Age.
- Used JavaScript along with D3 and Waypoints to assemble the data into an interactive tree visualization.

The Love Machine

December 2018 - March 2020

- Led a team of 24 engineers to create a system which matched 1500 students at Georgia Tech with potential soulmates using genetic algorithms.
- Published an article on "Towards Data Science" detailing user interviews, methodology, and product analysis.
- Published an article on "The Startup" using Tableau to discuss political bias in the user pool.
- Raised \$2000 in funding towards a Valentine's Day dinner for 200 users to meet their matches.
- •. Organized catering, reserved an event space, and managed volunteers for the Valentine's Day Dinner

Systems Neural Engineering Lab

August 2017 – May 2019

• Used DeepLabCut 2 and a FLIR dual-camera setup to create a 3D rat pose estimation system.

EDUCATION

Georgia Institute of Technology

August 2016 - May 2020

BS Computer Science, Concentration: Artificial Intelligence and Human-Computer Interaction, GPA: 3.56/4

- Artificial Intelligence Club:
 - Communications Officer: Implemented advertising methods leading to a 200% increase in membership.
 - President: Worked with two institute finance offices to raise \$5000 for a club GPU.

University of New South Wales

August 2019 – January 2020

- Blitz Student Newspaper:
 - Photographed, interviewed, and summarized "The Big Cheese" a multi-day cheeseburger eating tournament.