

# Thomas Archer

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## EDUCATION

### **Santa Clara University, Santa Clara, CA**

**Expected Spring 2020**

Bachelor of Science in Computer Science, Minor in Mathematics

**Relevant Coursework** - Data Science with Python, Probability and Statistics, Linear Algebra, Data Structures, Object Oriented Programming, Theory of Algorithms, Design and Management of Software, Computer Networks, Theory of Automata, Web Programming Applications

## PROJECTS

**Course Evaluation Analysis** - Generated analysis of Santa Clara University's quarterly course evaluation information by scraping the university's online database of student evaluation forms, then producing visualizations and recommendations for the best courses to take using information collected on professor and course difficulty ratings.

**Liver Patient Prediction Model** - Performed exploratory analysis of hospital liver patient data using python visualization libraries to identify and visualize biological factors that contribute to liver disease and created a predictive machine learning model to analyze future cases of potential disease.

**Coreef** - Created a website to increase awareness of endangered coral reef ecosystems and generated visualizations of reef restoration efforts with data collected from restoration organizations.

**Campscrape** - Developed a Python program to secure fast-booking campground reservations. Web scrapes online reservation services periodically to check for availability and notifies/books for the user.

## SKILLS

**Languages:** Python, SQL, Java, C++, PHP, Bash, HTML, CSS, Javascript, Swift

**Tools:** MySQL, NoSQL, Tableau, Git, Amazon Web Services, Unix, Excel, Powerpoint

**Python Libraries:** Pandas, Scikit-learn, Matplotlib, Numpy, Scipy, Seaborn, Selenium, BeautifulSoup

**Expertise:** Data Mining and Visualization, Predictive Modeling, Decision Analytics, Machine Learning

## EXPERIENCE

### **Assistant Instructor, Voyager Outward Bound**

**Summer 2018**

- Taught leadership, communication, and teamwork skills guiding participants in canoe expeditions.

### **Web Design and Marketing Intern, Global Citizens Initiative**

**Summer 2016**

- Updated website design and added functionality such as staff profiles and a donation feature.
- Managed social media and online marketing with Hootsuite to advertise and promote events.
- Graphically designed new promotional brochures and graphics using Adobe Illustrator.

### **Python and Java Instructor | Coditum**

**Winter 2015**

- Taught comprehensive introduction to programming courses to middle and high school students.
- Created introductory python curriculum to make learning more interactive and project based.

### **Technology Camp Counselor, Summertech**

**Summer 2014**

- Worked with small groups of students to teach and improve programming skills in Java and C++.

## LEADERSHIP AND COMMUNITY SERVICE

### **Director of Risk and Safety and Trip Leader, Santa Clara University**

- Planned, organized, and led over 20 overnight backpacking and day trips. Managed club safety equipment and organized wilderness first responder trainings.

### **Koforidua Hospital, Ghana**

- Volunteered in emergency medicine ward, shadowed ER doctors, and treated traumatic injuries.

### **Coral Restoration Foundation, Florida Keys**

- Maintained offshore coral nurseries and transplanted regrown coral back on to damaged reefs.