Madison Shea London

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EDUCATION

University of Richmond, Richmond, Virginia   September 2017 – May 2021

Bachelor of Arts

Double Major in Computer Science and Italian Studies, Minor in Linguistics

Cumulative GPA: 3.69/4.00

- **Honors**: Westhampton College Dean's List (Fall 2017, Spring 2018, Spring 2019, Spring 2020), All As Distinction (Fall 2017, Spring 2020), Phi Sigma Iota, Omicron Delta Kappa, Phi Eta Sigma
- **Relevant Courses**: Algorithms, Computer Organization, Software Systems Development, Multi-Agent Systems, Software Tools & Applications, Discrete Structures, Data Structures, Calculus II, Linear Algebra

Università degli Studi di Verona, Verona, Italy   September 2019 – December 2019

EXPERIENCE

William & Mary Geospatial Evaluation and Observation Lab, Williamsburg, Virginia   October 2020 – Present

Commonwealth Cyber Initiative Fellow

- Build prototype convolutional neural networks based on data collected in near-real-time from android phone applications
- Work directly with practitioners in the intelligence community and from silicon valley on a project examining 'data poisoning'
- Receive training on creating robust algorithms for data production, focusing on estimating road quality from satellite data

Genworth Financial, Raleigh, North Carolina   May 2020 – Present

Computer Vision Intern

- Develop a **Python** script with AWS Textract and Comprehend to extract sensitive data and precisely classify documents
- Update FCRA letters in **Visual Basic** in order to drive down borrower calls and improve lender satisfaction
- Support the MI Pricing Team by writing scripts with tabula-py and pandas to organize data from rate quote reports

Facet Wealth, Baltimore, Maryland   May 2019 – January 2020

Software Engineer Intern

- Applied business process knowledge to manually test and create automated Selenium tests both at the UI and API layers
- Contributed to core development by fixing bugs in the Client (**HTML**/**JavaScript**) and Server (**Go**/**SQL**) sides
- Collaborated with the engineering and product team to participate in the full development life cycle of a feature

PROJECTS

NASA Grant: Forest Disturbances and Ecosystem Services   August 2020 – Present

- Use Google Earth Engine in a Tethys web app, with **Python** and **Javascript**, to support research on the Amazon rainforest

Kruskal's Algorithm   April 2020

- Worked with **Java** Swing to implement Kruskal's algorithm which computes the minimum spanning tree (MST) of a graph

Smith–Waterman Nucleotide Alignment   February 2020

- Wrote a **Java** program to determine the optimal alignment of sequences based on gap penalty and weight matrix values

LEADERSHIP

Phi Sigma Iota Foreign Language and Literature Honor Society, Richmond, Virginia   July 2020 – Present

President

- Partner with on campus organizations to plan social and cultural events showcasing the value of international education

University of Richmond, Richmond, Virginia   January 2018 – Present

Teaching Assistant

- Lead, supervise, and plan drills for students in intensive Italian courses, targeting speaking, reading, and writing skills

Alpha Kappa Psi Business Fraternity, Richmond, Virginia   December 2019 – May 2020

Vice President of Membership

- Managed planning of recruitment, rush week, and pledge education to ensure the chapter's current and future success

TECHNICAL SKILLS

- **Languages**: Java, C++, JavaScript, Python, SQL, HTML, CSS, C, Visual Basic, Go, MIPS Assembly Language
- **Technologies**: AWS Textract, AWS Comprehend, Selenium WebDriver, Tableau, WordPress, BrowserStack

ACCOMPLISHMENTS & AWARDS

- 2019 Capital Region Celebration of Women in Computing Conference (CAPWIC) Scholarship Recipient
- QCER B2 Italian Proficiency (Upper Intermediate - Independent Competence)
- Translation of *Rosso Come Una Sposa* published with the University of Richmond's Italian Translation Lab