Madison Shea London

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EDUCATION

University of Richmond, Richmond, Virginia   September 2017 – May 2021
Bachelor of Arts, *Magna Cum Laude*
Double Major in Computer Science and Italian Studies (Departmental Honors Program), Minor in Linguistics
Full-Year Honors Thesis: "Due Sistemi Universitari a confronto: L'Università degli Studi di Verona e la University of Richmond"
Cumulative GPA: 3.76/4.00

- **Honors**: All As Distinction (Fall 2017, Spring 2020, Fall 2020, Spring 2021), All-AKPsi Academic Team '20-21, Omicron Delta Kappa, Phi Eta Sigma, Phi Sigma Iota, Dean's List (Fall 2017, Spring 2018, Spring 2019, Fall 2020, Spring 2021)
- **Campus Involvement & Leadership:** Alpha Kappa Psi Business Fraternity (Vice President of Membership), Italian Language and Culture Club (Public Relations Representative), Peer Academic Skills Tutor, Phi Sigma Iota Foreign Language and Literature Honor Society (President, Vice President), Teaching Assistant, UR Hillel, Club Volleyball (Vice President)
- **Relevant Courses**: Algorithms, Calculus II, Computer Organization, Computer Security, Cybersecurity for Business, Data Structures, Database Systems, Design & Implementation of Programming Languages, Discrete Structures, Linear Algebra

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

EXPERIENCE

International Business Machines, Washington, D.C.   August 2021 – Present
Associate Full Stack Developer

- Work across the entire system architecture to design, develop, and support high quality, scalable products and interfaces
- Engage proactively with clients to refine their current business and promote new strategies in line with the market forces
- Create everything from mockups and UI components to algorithms and data structures while delivering a viable product

William & Mary Geospatial Evaluation and Observation Lab, Williamsburg, Virginia   October 2020 – May 2021
Commonwealth Cyber Initiative Fellow

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

Genworth Financial, Raleigh, North Carolina   May 2020 – December 2020
Computer Vision Intern

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

Facet Wealth, Baltimore, Maryland   May 2019 – January 2020
Software Engineer Intern

- Applied business process knowledge to fix bugs and create automated tests at the UI (**HTML/JS**) and API (**Go/SQL**) sides
- Collaborated with the engineering and product team to participate in the full development life cycle of a web feature
- Wrote software documentation with Atlassian to minimize workload, create consistency, and improve company branding

PROJECTS

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

- Used **Python** and **Javascript** in a Tethys web app to support research on the Amazon watershed and indigenous territories

Kruskal's Algorithm   April 2020

- Using **Java's** Swing toolkit, this program implements Kruskal's algorithm to calculate the minimum spanning tree of a graph

Smith–Waterman Nucleotide Alignment   February 2020

- This **Java** program determines the optimal alignment of two sequences based on gap penalty and weight matrix values

TECHNICAL SKILLS

- **Languages**: Java, C++, JavaScript, Python, SQL, HTML, CSS, C, Visual Basic, Go, Lisp/Scheme, Smalltalk, MIPS Assembly, Fortran 77, Ada
- **Technologies**: AWS Textract, AWS Comprehend, Keras, Selenium WebDriver, Tableau, Git, WordPress, BrowserStack

ACCOMPLISHMENTS & AWARDS

- Outstanding Senior Award from the University of Richmond's Languages, Literatures, and Cultures Department
- QCER B2 Italian Proficiency (Upper Intermediate - Independent Competence)
- 2019 Capital Region Celebration of Women in Computing Conference (CAPWIC) Scholarship Recipient