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Michael Summers

Software Engineer

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SKILLS

Languages	Python, Javascript/Typescript, SQL, C
Frameworks/Libraries	Spark, Dask, Express, Angular, Flask, Pandas, NumPy, Pyarrow
Certifications	AWS Solutions Architect - Associate, Pt. 107 sUAS Pilot

TECHNICAL EXPERIENCE

Senior Associate Software Engineer Feb 2022 — Present
Capital One - Center for Machine Learning Richmond, VA

- Contributed to an internal ML model monitoring, interpretability, and explainability package in Python and Dask
- Built a team portfolio management template in React for adoption across our line of business
- Gained technical knowledge around key ML interpretability and explainability tools including ALE, SHAP, GAM, VATS, etc

Associate Software Engineer (Entry Level) Feb 2021 — Feb 2022
Capital One - Finance Tech Richmond, VA

- Built and maintained big financial data ETL processes in PySpark and SparkSQL
- Early engineer on team implementing a big data enrichment engine in PySpark from scratch
- On-boarded enrichment logic to enrichment engine through close collaboration with accounting/finance professionals
- Performed and maintained data modelling work for a NoSQL, single-table, fully-auditable enrichment management database using DynamoDB
- Frequently contributed back to internal platforms for data discovery, testing, and management

CODA Associate Aug 2020 — Feb 2021
Capital One Richmond, VA

- Engaged in a rigorous 6-month curriculum in software engineering and web development concepts and practice
- Built five unique, dynamic web applications using NodeJS/Express, Flask, Angular, React, in addition to a variety of other technologies

Geospatial Intern May 2018 — Dec 2018
Clemson Center for Geospatial Technologies Clemson, SC

- Founded and implemented the Drones for Good student drone rental program
- Developed comprehensive training curriculum for student drone pilots
- Managed portfolio of collaborative GIS projects, including an ADA accessibility guide to campus

Undergraduate Researcher in the Lab of Dr. Alex Feltus Aug 2017 — May 2018
Clemson University Clemson, SC

- Trained in the use of high performance computing resources for applications to bioinformatics and genomics workflows
- Trained in workflows to produce and interpret gene co-expression networks from next-gen sequencing data
- Gained extensive experience navigating and parsing data from online biological databases

EDUCATION

Bachelor of Arts in Economics, Clemson University 2015 — 2019
Minor Biochemistry

PROJECTS

InfraRun Dec 2021 — Present

- Description: Integrates the Richmond, Virginia local 311 system with the Strava mobile app, allowing runners to seamlessly report broken pedestrian and cycling infrastructure and request improvements, all without leaving the Strava app.
- Tech: Strava API, AWS API Gateway, AWS Lambda, Selenium

FeedMore Virginia Feb 2022 - Present

- Description: Work with interdisciplinary team to develop high-precision predictive model for food insecurity across the Central Virginia region to inform food bank deliveries.

ACTIVITIES

Capital One ProBono Data Program	Jan 2022 — Present
Founding Executive Team Member, CUhackit (Clemson's Student-Run Hackathon)	Mar 2017 - Mar 2018
Founding Director, Clemson Drones for Good Initiative	May 2018 - Dec 2018
Chair, Clemson IT Student Advisory Board	Mar 2017 - Mar 2018