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## JOSHUA TAPP

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### EDUCATION

**University of Virginia**, School of Engineering and Applied Science, Charlottesville, VA

June 2023

B.S. Computer Science

- GPA: 4.0 / 4.0
- Expected Minor in Data Science from UVA's School of Data Science
- Relevant Coursework: Machine Learning, Software Engineering Methods, Computer Architecture and Systems Development, Cloud Computing, Databases, Algorithms and Data Structures, Theory of Computation

**John Tyler Community College**, Midlothian, VA

June 2020

A.S. Engineering, Summa Cum Laude

- GPA: 3.94 / 4.0
- Concentration in Electrical Engineering and Computer Science

### TEACHING EXPERIENCE

**Theory of Computation Teaching Assistant**, University of Virginia, Charlottesville, VA

Fall 2021

- Accrued over 200 hours of teaching experience during semester, including teaching 100 hours of academic tutoring
- Led two undergraduate student groups throughout semester as representative of class faculty
- Conducted weekly oral examination sessions for student groups and provided real time feedback
- Analyzed over 40 undergraduate student's mathematical proofs in real time and returned feedback
- Instructed required mathematics (Combinatorics, Graph Theory, Logic, Calculus, etc.) to struggling students, leading to a two-letter grade improvement

**Academic Tutor**, John Tyler Community College, Midlothian, VA Fall 2019

- Tutored dozens of students in Calculus I-III, Discrete Math / Proof writing, Java Programming

### PROJECTS

**UVA Guide Project**, *Dev Ops Manager*

- Implemented, deployed, and managed automated CI/CD pipeline for project using Github, Github Actions, Django Unit testing, and Heroku
- Reported requirements, issues, and results to sprint team weekly
- Developed project with greatest number of git commits and features delivered in project's repository
- Collaborated with 4 software engineers to elicit requirements, produce feature set, develop testing methodology, implement application, deploy web app, and conduct beta-testing before product launch
- Formulated topological graph of project's problem space, executed Breadth First Search-Depth First Search (BFS-DFS) algorithm for problem space, integrated into Django based web application

**Data is Blind**, *Project Leader*

- Created a multi-faceted ML model in Python to accurately predict emotion labels across cultural background solely from photograph input
- Analyzed dozens of data sets and associated research publications to devise data set to accurately included bias of human labeling
- Met team-formulated milestones of training 4 Classification Models to prevent project failure
- Designing and training Convolutional Neural Net to anticipate desired results with expected accuracy of 80-90%
- Turning project into Undergraduate Capstone Thesis and planning to publish

### WORK EXPERIENCE

**Logistics Specialist**, Amazon, Richmond, VA

October 2016 - October 2019

- Constructed custom algorithm to accurately predict cubic volume and automate route consolidation; cut required labor by 50%
- Led national rankings for lowest cost metric record from October '18 - July '19
- Ranked top three for cost per parcel (CPP) in NASC network during tenure
- Devised daily plan to deliver 200-400k parcels to Amazon customers in state of Virginia, North Carolina, and DC metro

### TECHNICAL SKILLS

- Programming Languages: C / C++ | Java | Python | x86 Assembler | VHDL | Javascript | HTML/CSS
- Frameworks: Django | React
- Notable Libraries: SKLearn | TensorFlow | Numpy | Scipy | Bootstrap 5