

Kaleb Dickerson

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OBJECTIVE

Senior computer science major seeking a full-time position as a software engineer beginning Summer 2023

EDUCATION

Texas A&M University

Bachelor of Science in Computer Science (GPA: 3.94)
Minor in Mathematics

May 2023

IBM Cloud Advocate Certification

Certified in the basics of cloud computing such as cloud service, deployment models, and cloud architecture

Aug 2022

TECHNICAL SKILLS

Languages: Python, C/C++, Go, JavaScript, SQL

Technologies/Frameworks: Docker, Kubernetes, Linux, React, Django, Node, PyTorch

Other: Machine Learning/Graph Neural Networks, Game Design, HDL, Assembly

EXPERIENCE

IBM

Software Developer Intern

May 2022 – Aug 2022

Austin, TX

- Software developer intern on IBM's Global Cloud Optimization Team (GCOT)
- Collaborated closely with others to complete projects requiring strong knowledge of Docker, Kubernetes, Go, Git, and general cloud computing concepts
- Developed a metrics test to measure performance of a k8s cluster when scaling from 2 to up to 10 nodes and then back down, reporting time taken and stages of visibility from IBM Cloud CLI and Kubectl
- Optimized Docker images, decreasing vulnerabilities from 2 to 0 while also decreasing image size by 20 MB
- Built an interactive Kubernetes learning game "Podfather" using k8s API, to be used as a benchmark for IBM Cloud
- Delivered weekly status updates to team in an Agile environment

Texas A&M University

Peer Teacher

Sep 2021 – Aug 2022

College Station, TX

- Instruct students on concepts and assignments, and lead lab sessions of 30 students
- Help students visualize problems by drawing pictures, re-explaining problems in simpler ways, or active demonstrations
- Practice communication skills and patience, gain experience teaching others

Texas A&M University

Research Assistant

Jun 2021 – Sep 2021

College Station, TX

- Research assistant under Dr. Shuiwang Ji in machine learning
- Worked in teams of 5 requiring intense collaboration to develop new uses for graph neural networks, designed networks to excel at tasks such as 3D geometry prediction for molecules
- Competed in open challenges such as the 2021 KDD Cup hosted by Stanford University
- Acquired experience reading research papers, using PyTorch to implement different deep learning models, and processing extremely large datasets of up to 120 million molecules

PROJECTS

Podfather | Docker, Kubernetes, Kubernetes API, Go

Aug 2022

- Designed a Kubernetes learning game over 3 weeks designed to help others gain an understanding of Kubernetes
- Board, player and pieces of game were all different kinds of pods in cluster
- Board API to allow players to interact with cluster without having read/write access
- Intracluster networking using DNS name to allow players to hit the board's API

Melo | Python, Django, Javascript, React, Spotify API, OpenCV

Sep 2021

- Created web application during a hackathon with a group of 4 with React and Django to detect user mood, and play a song fitting that mood
- Sent picture of user to backend, where an OpenCV pretrained network detected 1 of 7 different emotions
- Mapped emotions to 10 characteristics such as max valence, used to differentiate songs based on emotion
- Played random song matching emotion in the UI through Spotify API