Anupam Pokharel

apokhare@alumni.cmu.edu | (434) 227-9288 | Website | Github

EDUCATION

B.S. in Statistics & Machine Learning   Pittsburgh, PA | Graduated Dec. 2021
CARNEGIE MELLON
Dean's List with High Honors in Fall 2020, Spring 2021
3.59 GPA (last two years)
Coursework:Imperative Computation, Functional Programming, Parallel & Sequential Data Structures & Algorithms, Intro. to Computer Security, Distributed Systems, Modern Regression, Advanced Data Analysis, Intro. to Machine Learning, Intro. to Deep Learning, Computer Networks, Parallel Computer Architecture & Programming

WORK EXPERIENCE

IBM | FULL-STACK SOFTWARE ENGINEER   Austin, TX | Aug. 2022 -
IBM Cloud

- Working as one of three members of a squad tasked with developing new features, addressing problems and requests for improvements, and maintaining operating and security/compliance standards for the CLI of IBM Cloud (and its integration with plug-ins developed by other teams), primarily by way of submitting and providing reviews for pull requests on the program's codebase

IBM | SOFTWARE DEVELOPER   Poughkeepsie, NY | Feb. – Jul. 2022
Competitive Insights (which subsumed CPO from Summer 2021)

- Continued and completed work on Summer 2021 projects
- Led a project on Power Systems: designing a fully automated stack for comparing shared processing adjustments by hypervisor firmware with resource-scaling by Openshift's HPA during erratic load surges created by a suite of bootstrapped applications and virtual user activity profiles that leveraged Summer 2021's work

IBM | BACK-END DEVELOPER INTERN   Remote | May - Aug. 2021
Competitive Project Office (CPO) in Cloud and Cognitive Software Division

- Mainly worked on project to benchmark systems orchestrated by Openshift on two architectures – IBM z/Arch. and Intel x86 – during I/O- & CPU-bound workloads (executed using a containerized Flask upload/download microservice for IBM Aspera coded from-scratch), via Javascript code generating variable emulated user activity

CARNEGIE MELLON UNIVERSITY | UNDERGRADUATE TEACHING ASSISTANT   Pittsburgh, PA | Feb. - May 2021
Department of Math

- Led weekly recitations to review course material and co-conducted grading for the Spring 2021 offering of 21-120: Differential and Integral Calculus

PROJECTS

NUTR-EZ NUTRITION AID ⬈   Project Exhibition (Devpost)   PYTHON3, HTML | SEPT. 2020
Leveraging statistical inference and ML techniques, this nutrition tool – hosted on a localhost web server developed from scratch – generates personally-tailored, profile-specific meal recommendations that adapt to user approval or critique

PARALLELIZED INFERENCE ON RNNS ⬈   Project Exhibition (GH Pages)   C++, CUDA, BASH | DEC. 2021
A project that explores the speedups attainable by parallelizing some parts of inference- time Recurrent Neural Network (RNN) computations, at varying extents of compromise on accuracy

SKILLS

Languages: C++, C, Python (frequent work Numpy, Pandas, Flask, Requests, OpenCV, and PySimpleGUI libraries), Golang, Java, Javascript, Intel x86 Assembly, Standard ML of NJ, R/SQL (for collating and querying large datasets)
Technologies and Professional Tools: Git and Github, AWS (EC2, mainly for GPU-accel. model-training), Docker and Dockerhub, Setup and Use of Hypervisors (e.g. PowerVM and z/VM), K8s and Openshift (esp. for automated architecting with CLI)
Conceptual and Technical Proficiency In: Hardware virtualization, Networking protocols and security, RESTful principles and API design/use, Data structures & algorithms, Concurrency considerations (synch./asynch. execution, mutex, etc.)