Anupam Pokharel

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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, Computer Vision, 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 -

Cloud

- Working as one of three members of a squad tasked with developing new features of, addressing problems with and requests for improvements on, and ensuring architectural and security/compliance standards are upheld for the IBM Cloud CLI (and its integration of plug-ins developed by other teams), mostly by way of submitting and reviewing pull requests on the program's codebase (in Go) and DevOps assets (usually with Bash, Jenkins, and Travis)

IBM | Software Developer — Poughkeepsie, NY | Feb. – Aug. 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 a 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 | 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 – supported by emulated server/storage on localhost – 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

Technologies and Professional Tools: Git and Github, Docker and Dockerhub, CI/CD (e.g. Jenkins and Travis), Cloud resource mgmt/provisioning (mostly on IBM Cloud & AWS EC2), Setup/use of hypervisors (z/VM), Container orchestration (k8s, Openshift)
Languages: C++, C, Go, Java, Javascript, Ruby, Shell scripting, Intel x86 Assembly, Standard ML of NJ, Python (frequent work with Numpy, Pandas, Flask, Requests, OpenCV, and PyTorch libraries), as well as more data-centric experience with R and SQL
Conceptual and Technical Proficiency in: Hardware virtualization, Networking protocols and security, RESTful principles and API design/use, Data structures & algorithms, Concurrency (threading, mutex, etc.), ML (high-dim. data & PCA, modeling, CV, etc.)