

Anupam Pokharel

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EDUCATION

Carnegie Mellon

Pittsburgh, PA | Graduated Dec. 2021

B.S. IN STATISTICS & MACHINE LEARNING, MINOR IN COMPUTER SCIENCE

Dean's List with High Honors (F '20, S '21); 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

VISA | SENIOR SOFTWARE ENGINEER

Austin, TX | Sep. 2025 -

Global Design Engineering

- Developing, preparing to scale, and deploying through alpha, beta, and production stages the systems of an application enabling rapid prototyping by producing ready-to-publish code of webapps based on natural-language ideas or queries

IBM | SOFTWARE ENGINEER I -> SOFTWARE ENGINEER II

Austin, TX | Aug. 2022 - Sep. 2025

Cloud

- Key member of the engineering team for the systems powering the Account Management experience of IBM Cloud
 - tech lead and service-owner of the central webapp for managing the billing and account ownerships of Cloud accounts, with several hundred daily users; prototyped Version 2.0 on a new cross-microservice framework
 - point-person on the problem-identification, proposal of solution, implementation of the code, and delivery of capability to interoperably use Redhat ID or IBMid to generate a web identity to authenticate into the Cloud
- Had full-stack responsibilities with critical aspects of services that deliver IBM Cloud Platform's IaC experience
 - deciding data schema and writing business logic exposed as APIs that execute protocols for organizing resources
 - writing and reviewing code for the webpages deployed to cloud.ibm.com/projects and for a GraphQL-based middleware enabling performant and scalable data-processing with 30%+ speedup from prior solutions

IBM | BACK-END DEV. INTERN -> SOFTWARE ENGINEER I

Poughkeepsie, NY | May - Aug. 2021; Feb. - Aug. 2022

Competitive Projects Office / IBM Research

- 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 profiles generating stochastic 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

FEATURED PROJECTS

SPEEDCLERK: IT HELPDESK COMPANION

[Demo Video](#)

JS (NODE.JS & REACT.JS), PYTHON3 | NOV. 2024

A system for organizing support tickets powered by a recurrent automation that ingests emails from several monitored inboxes into a database and then synchronizes the events on message threads with a webapp presented to the end-user

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: VCS (git, Gitlab/Github), Docker(hub), CI/CD (e.g. Jenkins, Travis, Tekton), 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/Typescript (multiple frameworks, e.g. React.ts, Express.js), Ruby, Shell scripting, SML/NJ, Python (especially with PyTorch, Numpy, and OpenCV libraries for CNNs/ML/DL), as well as more data-centric experience with R and SQL

Conceptual and Technical Proficiency in: Networking protocols and security, RESTful principles and API design in a microservices architecture, Compute virtualization, Safe concurrency, Data structures and algorithms, ML (high-dim. data & PCA, modeling, CV, etc.)