Ritik Ghanshani

SOFTWARE DEVELOPER | COMPUTER SCIENCE ENTHUSIAST

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Education

Drexel University   *Philadelphia, PA*
BACHELOR OF SCIENCE IN COMPUTER SCIENCE   *Graduation: September 2022*
SUMMA CUM LAUDE   *Cumulative GPA: 3.91*
Concentrations in AI and Computer Vision

Professional Experience

Amazon Robotics   *North Reading, MA*
SOFTWARE DEVELOPMENT ENGINEER 1   *October 2022 - Present*

- Deploying multiple new nodes for robotics simulation platform through cross team collaboration as part of away team
- Automated testing for multiple components of a globablly deployed robotics solution
- Developed a report generating dashboard to consolidate, cache and display data from multiple sources
- Built a scalable caching service on AWS using SNS notifications and periodic queries across multiple data sources
- Manage end to end development process including feature planning, release schedule, and task prioritization
- Served as the official mentor to multiple co-ops, providing feedback and coaching to help develop their careers
- Support and maintain team services as well as respond to tickets as the oncall engineer

Moberg Analytics Inc.   *Philadelphia, PA*
DEVOPS LEAD AND CLOUD DEVELOPER   *September 2021 - August 2022*

- Developed CI/CD pipelines using Docker and IBM Cloud to automate testing and deployment to production environment
- Utilized Docker to interface multiple Flask applications for clinical trials with Celery, PostgreSQL DB, and AWS S3
- Pivoted existing applications to serverless deployments with minikube and knative to reduce costs of deployment
- Maintained a Kubernetes data-management application for 2 clinical trials on Neurocritical care with over 50 sites
- Refactored existing code base to modularize redundant code, improve maintainibility and reduce coupling
- Reduced costs of deployment by 94% through serverless deployments with minikube and knative software

Bristol Myers Squibb Company   *Hopewell, NJ*
CLOUD DEVELOPER CO-OP   *September 2020 – March 2021*

- Built a front-end React application to assist 200 projects with generating JSON configurations for AWS deployment
- Refactored codebase for the prototype application to incorporate design patterns and ensure maintainibility
- Created backend functionalities using AWS API Gateway and Lambda to provide context-based suggestions
- Hosted the single page application on AWS S3 using CloudFormation and CloudFront
- Published an npm package to support importable plug and play use of the application in multiple projects

Agilent Technologies   *Wilmington, DE*
SOFTWARE ENGINEERING CO-OP   *September 2019 – March 2020*

- Devised a dashboard to automate data pipelines and generate reports, saving the Production Manager 10 hours per week
- Managed 6-month dashboard-development process, handling various scope and timeline adjustments
- Incorporated KPI analytics for 10+ GB of logistics data into the dashboard using ASP.NET
- Generated optimal shipment dates by processing raw shipment data and purchase history in a SQL database

Math Resource Center at Drexel University   *Philadelphia, PA*
MATH TUTOR   *April 2019 - June 2019*

- Helped students with questions and topics related to Calculus 1-4 and Linear Algebra.

Culture CoLab, Ltd. *Ranchi, India*
DIGITAL INNOVATION INTERN *February 2018 – April 2018*

- Launched a Google Play Store App to connect thousands of rural students to Learn and Earn opportunities
- Implemented Authentication and Database for storing 5+ GB user data using Firebase
- Utilized Microsoft Azure and Tableau to determine high potential customers from the userbase
- Constructed an information portal using Raspberry Pi and Alexa to use voice recognition to welcome 300+ visitors a month

Projects

Digital Pathology | Senior Design Project *Philadelphia, PA*
MLOPS LEAD ENGINEER AND PRODUCT OWNER *September 2021 - June 2022*

- Architected a Deep Learning pipeline using AWS for data collection, preprocessing, training and inference
- Engineered a development environment and various tools to allow for rapid training, testing and deployment
- Developed multiple Deep Learning models using PyTorch to diagnose potential chronic sinusitis in digitized cell slides
- Created and maintained the vision, roadmap, and backlog of work through the project's life cycle

CIFAR-10-Classifier | Deep Learning Project *Philadelphia, PA*
STUDENT *June 2021 - September 2021*

- Trained various neural networks on the CIFAR-10 dataset to compare performance
- Developed a Deep Learning library from scratch to build ANN, MLP, GAN and CNN models

PawNet | Freshman Design Project *Philadelphia, PA*
DEVELOPER AND UI/UX DESIGNER *January 2019 – June 2019*

- Used Flutter and Agile methodology to develop the font end of a Pet Matching Mobile App
- Implemented Authentication and Database using Firebase
- Followed Agile methodology throughout the development of the product

Skills

Programming Languages	Python, Javascript, Java, Kotlin, MATLAB, SQL
Frameworks	React, Flask, NumPy, Pandas, .NET, Node.js, PyTorch, OpenCV, CDK
Technologies	PostgreSQL, Kubernetes, Docker, Git, GitHub Actions, Bitbucket Pipelines
Amazon Web Services	EC2, IAM, ECR, EFS, RDS, S3 Glacier, Lambda, CloudFormation, SageMaker Studio, API Gateway
Operating Systems	Linux, Windows, MacOS

Honors

2018-22	**Recipient**, Dean's List (8 out of 9 eligible quarters)	*Drexel University*
2018-22	**Recipient**, Dean's Scholarship	*Drexel University*

Activities

2020-22	**Member**, Algorithms & Data Structures Club	*Drexel University*
2020-22	**Member**, Artificial Intelligence Club	*Drexel University*
2019-20	**President**, Drexel Robotics Club	*Drexel University*