ARNAV NATH MISRA

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EDUCATION

Boston University - College of Arts and Sciences, Boston, MA

May 2023

Bachelor of Arts: Computer Science, Double Major: Economics, GPA: 3.63

- Boston University Trustee Scholar Merit-based full ride scholarship awarded to 20 students in class of 2023
- Dean's List: Fall 2019, Fall 2020, Spring 2021, Fall 2021
- 2020 National Collegiate Men's Team Squash Sereus Cup Champions, BU Squash Trainer

RELEVANT EXPERIENCE

Software Engineering Intern, Infinite Convergence Solutions, Chicago, IL

Jun 2022 - Present

About: Infinite Convergence provides next-generation messaging and mobility solutions to enterprises around the world.

- Developed an efficient multi-threaded messaging server that handles 200 clients per second in standard HTTP protocol
- Created functions to handle concurrent requests of clients through websockets and directing them to other microservices
- Implemented the server for testing bottlenecks in Netsfere's messaging platform and analyzing latency trends at scale

Economic Pricing Advisor, CritiMeds Consult, India

Dec 2021 - Present

About: Critimed consults is a healthcare startup focused on delivering quality critical health services at affordable costs

- Exploring dynamic pricing models for healthcare services to focus on improving access to quality healthcare across India
- Developing a self sustainable EMT model through diagnostic algorithms that drastically improve respondent's calls / min
- Created a baseline subscription model offering remote quality doctor consultations to a portfolio of 5 Indian MNCs
- Implementing software to enable expert practitioners to remotely monitor ICU's in healthcare deficit areas of India

Research Assistant, Prof. Hannah Douglas, Boston University, Boston, MA

Feb 2022 – May 2022

About: Studied the "Emergence of a novel grassroot economy in response to the personal protective equipment supply crisis

- Built a python framework that parses Slack conversations through its API as a matrix of interactions through linked nodes
- Assisted Prof. Douglas with analyzing the processed data to study centralisation and structure of this grassroot economy
- Presented findings by creating data visualization network graphs using open source platform Gephi

Software Engineering Intern, Planet Hool, India

Jun 2021 - Aug 2021

About: Planet Hool is a gaming company that develops card games that make learning the game bridge easier

- Refactored the frontend of their card game HOOL from simple HTML/CSS built to ReactJS
- Created HOOL smart bot players in C with adjustable difficulty levels and integrated it with the main ReactJS build
- Developed the group chat interface for HOOL with XMPP protocol using Node.js and NoSQL databases

Summer Intern, Know Your Meds, Boston, MA

May 2021 - Aug 2021

About: KnowYourMeds is an AI based mobile application focused on increasing health outcomes of chronically ill patients

- Dealt with the World's Largest database of suspected side/adverse effects (World Health Organization).
- Developed the app's analytics dashboard in ReactJS that tracks and graphs a plethora of user engagement data
- Collaborated closely with senior management to connect product goals with medical research & identify data applications

PROJECT EXPERIENCE

Data Analysis Project, USA today, Aleszu Bajak: Senior Data Reporter

Feb 2022 – May 2022

- Developed a Persistent Wideband Language Analysis framework for automated recording, mapping and analysis of discourse for an arbitrary number of candidates
- Sourcing data from: Twitter, Youtube, Email, or arbitrarily formatted plaintext
- Integrated Google's natural language AI to provide a social network analysis of candidates in the context of discourse

Independent projects

Nov 2020 - Mar 2022

- Implemented first order Markov chains to develop a text generation model in python
- Created a fraudulent job post detection algorithm with an accuracy of 99% using boosted classification trees
- Built a Tensor flow program to recognise handwritten digits with 99% accuracy using the MNIST dataset
- Developed a modular ReactJS and Bootstrap based fashion ecommerce blog "Almost Gods"
- Studied effects of the Affordable Care Act on income disparities in private health insurance using regression analysis
- Studied currency devaluation between India and the US through a compounded annual differential inflation growth model

SKILLS

Frameworks: React, NodeJs, Wordpress, Material UI, Bootstrap, Pandas, Numpy, Matplotlib, SciKit, Tensorflow, Keras Language: Java, python, Ocaml, STATA, JavaScript, HTML/CSS, C, STATA, R