

Neel Bhalla

Interests in Web Application, Cloud and Distributed Systems, Robotics, and Machine Learning

EXPERIENCE

Chewy, Boston, MA

Feb 2023 - Present

Software Engineer 1

Worked within the Customer Service Vertical for the CSR Buddy team, a full stack application that provides Customer Service Reps with the ability to check, service, and perform actions for Chewy Customer Accounts. Participated in the agile process, working on tickets and epics. Architected new pages and functionality from new integration points such as Chewy's VAMS (Veterinary Management System) and Account Systems (for Social Logins). The new pages equipped CSR with more data decreasing vet-diet based contact transfer rates by 26%. Wrote unit tests with jest+react-testing-library to increase code coverage from (45% to 65%), decreasing tech debt. Also architected the b layer touchpoints which provide the front-end data.

Managed and Deployed releases to the Alpha Production Environment as a Release manager, working with Jenkins, AWS (ECS), and terraform. Performed bookkeeping of tickets and feature flags through confluence and validated Releases as non breaking through datadog and splunk.

Architected and implemented NMA-Chat, a mobile solution for facilitating chats with Chewy Mobile within the App through a hybrid experience. The application was architected with Typescript and Next.JS, embedded in the mobile platform as a hybrid experience. The application, to be deployed by late November, is forecasted to service nearly 3,000 chats per day with customers through the mobile ingress point alone.

Raytheon Technologies, Tewksbury, MA

June 2022 - Aug 2022

Summer Intern

Worked for the Systems Integration and Test Group with Security Clearance. Developed object oriented radar tools in Lua, Matlab. Tested and verified tools against requirements using Jenkins (CI/CD).

Chewy, Boston, MA

Jan 2022 - June 2022

SDE Co-op

Work in an agile development environment, collaborating with Backend and QA teams to develop web apps for the Shelter and Rescue team. Developed Vue components to improve user experience. Used Datadog and Splunk for application monitoring and debugging. Deployed features in a Jenkins (CI/CD) pipeline. Developed backend features in Java Spring Boot framework.

Developed a web-based AR application that allows users to view select Chewy products embedded in 3D space via WebXR and Three.js. Developed functionality to rotate and move the object and implemented UI links to Product Display pages.

NeelBhallaBos@gmail.com

(978) 831 8115

Linkedin ↗ [NeelBhalla2021](#)

GitHub ↗ [ashdawngary](#)

EDUCATION

University of Illinois,

Urbana-Champaign

Grainger College of Engineering

M.S. Computer Science

Expected, May 2024

Northeastern University, Boston MA

Khoury College of Computer Sciences

B.S. Computer Science and Mathematics
and Minor: Robotics Engineering

Sep 2020 - Dec 2022

SKILLS

Languages: Typescript, Javascript, Java spring boot, Terraform, C++, Matlab

Familiar: RUST

Databases: MySQL, postgresql

Frontend Frameworks: Vue, React, Next.js, Nest.js, Three.js

Frameworks: Bootstrap, Angular, Django, Spring Boot, Jest, Docker

App Development : Xcode (IOS), Android Studio (Android)

Agile Tools - Confluence, JIRA, Github(Issues + Actions)

Software Development Tools - Datadog, Splunk, Postman, BitBucket, Github, Scrum, Jenkins, Selenium Webdriver, Web tools, Gitlab

ML Frameworks - Graphlab, TensorFlow

Hardware - Raspberry Pi, ARM, Arduino, Android controller

Communication Protocol - TCP/IP, I2C

AWARDS

Winner, Congressional App Challenge, 2018

Platinum Rank in USA Computing Olympiad, 2018-2019

Codeforces Expert Rank (1688), 2018

Hacker Cup, Qualification Round(274th), 2021

Dean List, Northeastern University, 2021

Winner, FTC Robotics World Championship, 2018

Northeastern University, Boston, MA Sep 2021 – Present
Sandbox Software Developer
Developed Khoury Office web application React, Next.js frontend and Nest.js backend. Designed to enhance the student online office hours experience.
Developed test automation suite in Jest and Cypress frameworks.

Northeastern University, Boston, MA Jan 2021 – Present
Head Teaching Assistant
Teaching Assistant for CS 2500 (Computer Fundamentals) and CS 3800 Theory of Computation Course. Mentored and answered questions to help students conceptualize the course content.

Raytheon Technologies, Tewksbury, MA June 2021 – August 2021
Summer Intern
Worked for the Systems Integration and Test Group with Security Clearance. Developed object oriented radar tools in Lua, Matlab. Tested and verified tools against requirements using Jenkins (CI/CD).

Oneso Technology, Burlington, MA June 2020 – March 2021
Software Developer
Implemented file readers for Xpatch (a radar simulation tool) in Python.
Developing machine learning experiments to identify targets in radar images.

Modern Smiles Dental Care, Burlington, MA Sep 2019 – June 2020
IT Staff
Maintained machines, network, printers and software at a Dental office.
Debugged and fixed IT issues as needed.

Draper, Cambridge, MA July 2018 – Aug 2018
Summer Intern
Developed software for the Snapdragon Drone UAV. Software was developed in Python/Tkinter on Linux and communicated with the ROS on the UAV.

PROJECTS

Northeastern CS Research, Boston, MA Oct 2021 – Present
Working with Prof. Octavia Camps to research neural network modules for Computer Vision Systems. The research seeks to develop a set of structured layers to current deep architectures, designed using dynamical systems theory and statistics fundamentals, which capture spatio-temporal information across multiple scales.

MIT CS Prime Research, Cambridge, MA Jan 2019 – Aug 2020
Developing distributed end-to-end tracing algorithms for root cause analysis of cloud based applications using timely data flow and graph abstraction.

INTERESTS

Hiking, Ultimate Frisbee, Robotics