

NIKHIL MOLLAY

Boston | MA | 02120 | 857-424-6864

mollay.n@northeastern.edu | <https://www.linkedin.com/in/nikhilmollay/>

Available: Throughout Spring and Summer 2022.

EDUCATION

Northeastern University, Boston, MA Jan 2021- Present
Khoury College of Computer Sciences Expected graduation: Dec 2022
Master of Science in Computer Science GPA: 4.0/4.0
Related courses: Programming Design Paradigm, Algorithms.

Vellore Institute of Technology, Vellore, India June 2013-August 2017
Bachelor of Technology in Computer Science and Engineering, GPA: 8.6/10.0
Related courses: Object Oriented Programming, Data Structures and Algorithms, Databases, Software Engineering.

TECHNICAL KNOWLEDGE

Languages: Java, C#, C++, Python, JavaScript.
Databases: MySQL, MongoDB
Web technologies: HTML, CSS, AngularJs, BootStrap, PHP, NodeJS.
Certifications: Parallel Programming with C# and .NET – Udemy, Machine Learning A-Z – Udemy, Deep Learning A-Z – Udemy, Spring Framework – Udemy.

WORK EXPERIENCE

Siemens Healthineers, Bengaluru, India. July 2017-July 2019
Software Developer Research and Development

- Designed and developed a predictive analysis model utilizing Python's Scikit learn library to foresee the failure of the Atellica system, which is a lab-diagnostics automation instrument that substantially reduces human intervention and significantly improves test throughput. The predictive model invokes self-diagnostics and calibration features of the device, which drastically lowers failure rates and downtime, saving costs in workforce and maintenance.
- Worked in a multinational team to create new features for a diagnostic instrument called Dimension EXL. Coded in C and C++, in a Debian environment with versioning performed in SVN. Wrote shell scripts to automate processes and revamped the UI leveraging GTK.
- Engineered new features for a universal Siemens UI framework called the Universal Instrument Workbench (UIW). Mainly worked with .NET framework and Microsoft Fakes for Unit testing with versioning done on TFS. Was also tasked with mentoring interns who were developing a mobile application for a module of our project using Xamarin.

Innovation Kolkata, India. June 2016-July 2016
Web Development Intern

- Built three websites with HTML, CSS and Bootstrap as the frontend, with JQuery and JavaScript as the client side and PHP, as the backend. I also constructed several RESTful API's using NodeJS with mongoose and express.

PROJECTS

Image Processing Software January 2021-May 2021

- Built an image processing software using Java 11, Swing framework, and an optimal 'Object Oriented Design' approach. The software allows the user to perform various image processing tasks like sharpen, blur, mosaic .etc. The project features use of many advanced design patterns such as the MVC(Model View Controller), Command, Observer, Singleton and Builder to ensure maintainable, extensible and loosely coupled code..

AI Powered Chat-Bot August 2018

- Presented my idea for an AI-powered chat-bot for the Siemens Healthineers hackathon to improve customer and technician support. I explained the idea to a group of 200+ people and top-level management of Siemens. As a result, my project was approved and placed in the top 5 among many other projects. The chat-bot I implemented runs on an unsupervised learning algorithm coupled with Natural Language Processing (Stanford NLP library). The user reviews the chat-bot's result and decides whether the response is accurate. If not correct, the bot looks for another solution or obtains it from the user or an expert.

INTERESTS/ACTIVITIES

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- Musician and was an active member of the VIT Music Club. Participated in multiple inter collegiate competitions.
 - An active member of the NGO Make a Difference (MAD) and Darjeeling Child Care Welfare Society.
 - Published a paper titled "Optimization of targeted digital advertising in shopping complexes using trends identified from human activity heat maps" in the journal IJEDR.