Gaurav Ghati

Irvine, CA 92612 | +1 (949)620-9336 | gghati@uci.edu | https://gauravg.in | github.com/gauravghati

EDUCATION

University of California, Irvine   Sep 2023 – Dec 2024 (Expected)
Master of Computer Science   *Irvine, California*
Courses: Operating Systems, Database Management, Algorithms, Data Structures, Machine Learning with Data Science

Pune Institute of Computer Technology   May 2018 – Jun 2022
Bachelor of Engineering in Information Technology, GPA: 9.21 / 10   *Pune, India*

TECHNICAL SKILLS

Languages: C, C++, Java, JavaScript, Python   **Tools**: Git, Docker, Google Cloud, Mongo Altas

Frameworks: SpringBoot, NodeJS, Django, ReactJS   **Databases**: MySQL, MongoDB

EXPERIENCE

Bank of New York Mellon   Jul 2022 – Aug 2023
Software Engineer   *Pune, India*
- Developed an electronic signature application using Java SpringBoot and AngularJS. This application serves both our company's internal needs and is accessible to our clients for digitally signing documents.
- Resolved more than 100 Software Composition Analysis (SCA) and vulnerabilities issues.
- Adapted Agile methodologies, CI/CD, and Test-Driven Programming to uphold strong programming practices.

Acumensa Technologies   Jan 2021 – Mar 2021
Software Developer Intern   *Bangalore, India*
- Built a Supply Chain Management software, using Django REST APIs and ReactJS.
- This project provides multiple features for producers, consumers, suppliers, and sellers. And, solves the existing problem of backtracking if any error is found in goods. Implemented the permission and approval frameworks.

Indian Institute of Management Ahemdabad   May 2019 – Jul 2019
Summer Project Intern   *Ahemdabad, India*
- Worked under guidance of Prof. Sanket Mohapatra on a project "Development of External Risk Indices", created an educational finance website, utilizing JavaScript for frontend and Python's Flask framework for the backend.

PROJECTS

Storage Class Memory Manager | *Operating Systems, Linux* | Github   Aug 2023 - Sep 2023
- Created a robust memory management system featuring an API reminiscent of the C malloc() and free() function.
- Developed chunking logic for memory allocation and deallocation, which utilizes freed-up memory on demand.
- This is done by mapping process virtual memory to file memory for persistence.

Dynamic Thread Scheduler | *Operating Systems, Linux* | Github   Nov 2023 - Dec 2023
- Created multi-threaded thread scheduler by implementing thread structure, and allocating thread stack dynamically in C.
- Implemented thread scheduling by creating a Circular Linked List to schedule threads in Round Robin fashion.
- Achieved concurrent non-parallel execution by context switching between threads using setjmp() and longjmp() kernel system calls.

Technology Assisted Review | *NLP, Django REST, ReactJS* | Github   Aug 2021 – May 2022
- Developed a Technology Assisted Review methodology using BERT and Bi-LSTM for document assessment.
- Implemented incremental learning by using a ranking algorithm to prioritize uncertain documents, thus increasing review accuracy by $\sim 45\%$.
- Employed pseudo rehearsal during incremental learning to prevent catastrophic forgetting and enhanced model training efficiency.

EXTRA CURRICULAR

- Served as a technical head of PICT IEEE Student Branch (PISB) for more than three years.
- Contributed to a few open source projects like C++ based machine learning library (MLpack) and Mozilla website.
- Written three technical blogs on medium.com/@gauravghati on topics like Natural Language Processing (NLP) models.