

# Ashwatha Easwaran Sureshkumaar

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## EDUCATION

Northeastern University | GPA – 3.7/4.0

Expected Dec 2026

Master of Science in Software Engineering Systems

Boston, MA

Course: Web Development (React, Angular), Database Design, Object Oriented Design and Programming (JAVA)

PSG College of Technology | GPA – 3.12/4.0

Apr 2023

Master of Science in Software Systems (5-years integrated)

Coimbatore, TN

Course: Machine Learning, Data Structures and Algorithms, Cloud Computing, Web Development, Operating Systems, Agile Development, C, C++

## EXPERIENCE

Caterpillar Inc - Associate Software Engineer (Full-Stack)

Jan 2023 - Jul 2024

Tech Stack: Linux, Vue.js, Node.js, JavaScript, C#

Chennai, TN

- **Spearheaded** Linux mapping tool development with **Vue.js** and **Electron.js**, enabling touchpad setup, monitor tuning, and real-time widget updates, **elevating** speed by 40%
- **Led** zero-defect release strategy with **CI/CD**, unit tests, automated debugging, **cutting** post-release defects by 30%, **securing** leadership recognition
- **Directed** application lifecycles for 3+ versions, managing 15+ features across 4 teams while **mentoring** 5 engineers on scalable patterns, **streamlining** deployments
- **Redesigned** GPS sync and backend processes in **C#**, **adjusting** system uptime by 30%, **minimizing** latency by 50%, **preventing** real-time failures
- **Diagnosed** real-time data failures, **guaranteeing** 100% backend sync uptime, enabling seamless updates across 5+ vehicle models, **strengthening** operational accuracy
- **Championed** backend workflow automation using **Bash**, **JavaScript**, and **Regex**, **polishing** system configurations, **cutting** manual work by 40%, saving hours

Anand Rathi Wealth Services Ltd (Fintech) - Software Engineer Intern

May 2020 - Nov 2020

Tech Stack: Python, Node.js, REST API, Sequelize, SQLAlchemy

Mumbai, MH

- **Initiated** API development in **Node.js**, **Python**, deployed on **AWS**, **executing** 10K+ transactions, **amplifying** query speeds by 20%, securing **seamless** operations
- **Revolutionized** Excel report automation in **Node.js**, **minimizing** 30% manual reporting time, **resolving** 95% of data discrepancies, **improving** accuracy for 500+ employees
- **Standardized** API documentation practices for **COB**, brokerage, SIP tracking, **adjusting** integration efficiency by 25%, **advancing** cross-team onboarding
- **Built** real-time **Slack** alerting for API errors, **shortening** detection time by 60%, **preventing** prolonged debugging cycles, **securing** system uptime
- **Pioneered** automation of **.dbf** file handling with **Python's SimpleDBF**, **eliminating** 70% of manual data entry, **upgrading** financial workflows by 40%

## PROJECTS

Virtual Study Group | Java, JavaFX, Chat Server, File Handling

Nov 2024

- **Developed a study hub** with **JavaFX**, enabling 50+ students to chat, share files, and organize sessions
- **Implemented event tracking** for 100+ study sessions, improving scheduling and boosting participation

Research Paper Search Engine | Python, BeautifulSoup, Requests, NumPy, Pandas

Jun 2022

- **Designed a search tool** in **Python**, scraping and indexing 1K+ research papers for easier academic access
- **Optimized ranking logic** with **NumPy**, improving citation-based filtering by 35% for better relevance

Room & Mates | Azure Data Studio, Docker, Power BI

Dec 2024

- **Constructed a matching tool** with **Power BI** to pair 100+ users based on shared living preferences
- **Secured user data** via encryption, reducing query times by 50% and enhancing reporting speed

## TECHNICAL SKILLS

**Programming & Frameworks:** Python, Java, JavaScript, Typescript, C#, C, C++, SQLAlchemy, Sequelize

**Cloud & Databases:** AWS (S3, Lambda, API Gateway), Azure, SQL, PostgreSQL, MySQL, NoSQL, Oracle

**Frontend & Backend Technologies:** HTML, CSS, Node.js, Vue.js, React, Angular, REST APIs, JSON, PHP

**Development & Tools:** Git, GitHub, Docker, Linux, JIRA, Visual Studio, Software Development Life Cycle (SDLC)