

# Ankit Kumar

Software Developer

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## EDUCATION

**MS in Computer Science (GPA : 3.89)**, *George Mason University* [🌐](#) Aug 2023 – May 2025 | Fairfax, US  
- **Relevant coursework:** Theory/Application of Data Mining (CS 584), Machine Learning (CS 688), Software Design and Architecture (CS 621)

**Bachelor of Engineering in Computer Science (GPA: 3.63)**, *Visvesvaraya Technological University* Aug 2016 – Jul 2020 | Mandya, India  
- **Relevant coursework:** Artificial Intelligence, Software Engineering, DBMS, Operating Systems, C Programming

## SKILLS

### Languages & Frameworks

Python, Angular Ionic, Node.js, React.js, Mongo DB

### Libraries

NumPy, Pandas, Scikit, Seaborn, Keras, Chart.js, Material UI

### Tools and Technologies

OpenCV, VS Code, GIT, Jira, MongoDB, Jupyter Notebook, Agile, Scrum

### Soft Skills

Proven problem-solver, Highly effective team player, Disciplined, Attention to Detail

## PROFESSIONAL EXPERIENCE

**Packaged Application Development Analyst**, *Accenture Pvt. Ltd.* [🌐](#) Feb 2021 – Jul 2023 | Bangalore, India  
- Pioneered solutions for the "Value Insights Platform," orchestrating a robust full-stack architecture using MEAN stack that achieved an impressive 30% performance boost of the application, showcasing proficiency in both frontend and backend development.  
- Engineered sophisticated, cross-platform interfaces for challenges related to user engagement, implemented advanced analytics tools such as Chart.js for in-depth user behavior analysis, and devised targeted UI/UX enhancements, resulting in a notable 20% reduction in bounce rates and a substantial boost in overall user engagement, for mobile and web platform.  
- Implemented intricate data visualization solutions with Chart.js, elevating data accuracy by 35% and reducing processing time by 20%, demonstrating expertise in full-stack data handling and presentation.  
- Proved myself as a problem-solver, and a high-performing team, ensuring near-zero errors in deliverables and maintaining a remarkable accuracy rate, underscoring commitment to excellence in full-stack project leadership.  
- Leveraged a comprehensive full-stack toolkit, including MERN and MEAN stacks, to seamlessly integrate backend and frontend components, employing advanced algorithms and data mining for optimal system performance.  
- Mentored new team members, providing comprehensive guidance on project intricacies and facilitating a smooth onboarding process.

## PROJECTS

**Recommender System Movie Ratings**, *Data Mining Coursework Project* Sep 2023 – Nov 2023  
- Showcased expertise in data analysis and applied advanced collaborative and content-based filtering techniques to develop a highly effective Recommender System.  
- Implemented hybrid approaches, integrating diverse data sources including movie genres, directors, and actors to enhance the precision of user-movie rating predictions.  
- Leveraged strong analytical skills to optimize the model using techniques like weighted hybrid models, regularization, handling cold start problems, and achieving outstanding performance in predicting user-movie ratings, with a focus on improving the Root Mean Squared Error (RMSE) metric.

**Accident Detection Using Image Processing**, *Undergrad final year project* Dec 2018 – Mar 2019  
- Orchestrated the development of an innovative accident detection system employing real-time surveillance cameras, significantly reducing emergency response times.  
- Implemented a cutting-edge Convolutional Neural Network (RetinaNet with Resnet50 backbone) and meticulously curated a specialized dataset for precise vehicle detection, ensuring superior model accuracy.  
- Engineered a bespoke algorithm employing a combination of Optical Flow and Object Tracking techniques to discern accidents by intricately tracking each vehicle's velocity vector, elevating the system's proficiency in recognizing critical events.  
- Innovated a swift notification mechanism, instantly alerting nearby rescue teams upon detecting accidents, streamlining and expediting emergency response procedures.  
- Showcased expertise in algorithmic design and meticulous implementation, exemplifying a hands-on approach in addressing complex challenges and delivering impactful real-world solutions.

## CERTIFICATES

- Python [🌐](#)
- Mobile Application Development (Android) [🌐](#)
- Full stack web development using MERN stack [🌐](#)
- Pandas [🌐](#)