ISHAN MATHUR

ishan@virginia.edu ⬦ https://linkedin.com/in/mathur-ishan ⬦ +1 (434) 953-1354

EDUCATION

Masters in Computer Engineering, University of Virginia   GPA: 3.85 — Dec '23
Bachelors in Computer Science, Gyan Vihar University, India   GPA: 3.71 — May '22

SKILLS

Certification	Python Institute (PCAP) - Certified Associate in Python Programming [Aug '20]
Languages	Python, TypeScript, Java, HTML, CSS, JavaScript, C#, R Lang
Data	MySQL, MongoDB, Elasticsearch, Redis, S3 Service, Linux, Data Structures and Algorithms
Tools	Numpy, Flask, NodeJS, AWS Cloud, Jira, Figma, Bootstrap, Firebase, Jinja2, Selenium, Git
Non-tech	Communication, Leadership, Teamwork, Flexibility, Problem-solving, Mentoring

EXPERIENCE

Software Engineer   May '20 - Jul '22
Fleksa   *Remote (Frankfurt, Germany)*

- Took charge of developing admin portal, database and indexing for platform that helped 1000+ restaurants grow digitally
- Designed globally scalable REST APIs with Flask & MySQL handling $3 Million+ GMV / year for orders & analytics
- Architected AWS cloud infrastructure to handle 500+ domains, auto-scaling, storage, and DOS attacks protection
- Integrated Google Partnerdash reservation & MyBusiness services using SFTPs boosting reservation by 50%
- Engineered micro-services for loyalty & up-selling program, resulting in 20% increase in monthly repeat users and orders

Tech Lead   Jul '20 - Aug '21
Crewbella   *Ajmer, India*

- Led the end-to-end development and launched digital contract-based hiring platform, garnering 3000+ sign-ups in 28 days
- Deployed robust payments system on Nginx using Python, JavaScript & cron-jobs resulting in 33% weekly returning users
- Optimized server load by 30% and ensured rapid scalability using 5+ cloud services, successfully handling 100 users/sec

Software Engineer Intern   Nov '20 - Jan '21
Zopnik Innovations   *Delhi, India*

- Built a low-latency search engine using Elasticsearch, leading to 12% increase in item additions with improved accuracy
- Scraped data from 7+ disparate sources using Selenium to populate the database with 200,000+ grocery products
- Identified supply-demand patterns using Pandas, allowing business for strategic price adjustments and increased profitability

PROJECTS

Medical Image Segmentation   Fall '22

- Trained & tested SegNet machine learning model on medical images to classify multiple features in 2D space
- Augmented training data to up-sample, used 13 convolutional layers in VGG16 network, & calculated dice score
- Optimized decoder network memory usage through paper: SegNet: Deep Convolutional Encoder-Decoder Architecture

Proton in Unity 3D   Sep '22 - Jan '23

- Fabricated a 3D model of a proton in Unity VR to visualize its realistic behavior inside an atom
- Implemented element-level mechanics and properties of various particles, along with forces acting between them
- Acquired knowledge of project management, C# language, & virtual reality engine to simulate the behavior of elements

Data Analysis and Visualization   Oct '19 - Dec '19

- Leveraged Selenium to extract & analyze 250,000+ public user data from Twitter based on location, bios, & tweets
- Implemented threading for efficient concurrent data collection, & utilized GraphJS to render frontend for the results

POSITIONS OF RESPONSIBILITIES

- Led high-performing team of 3+ result oriented developers at Fleksa, delivering projects across various domains
- Coordinated engaging sessions between professionals & students in bachelors to provide valuable career development insights
- Teaching Assistant for Defending Viruses, provided guidance in office hours to students & effectively evaluated assignments