ISHAN MATHUR

anm3hh@virginia.edu ⋄ https://linkedin.com/in/mathur-ishan ⋄ +1 (434) 953-1354

EDUCATION

Masters in Computer Engineering, University of Virginia　　　　　　　　GPA: 3.93 — Dec '23
Bachelors in Computer Science, Gyan Vihar University, India　　　　　　　GPA: 3.71 — May '22

EXPERIENCE

Full Stack Developer Intern　　　　　　　　　　　　　　　　　　　　　　Jun '23 - Present
1787 Financial Corporation　　　　　　　　　　　　　　　　　　　　　　*Remote (McLean, VA)*

- Spearheaded development of high-performing fintech MVP app in 9 weeks using Flutter, Python, MongoDB and AWS
- Orchestrated seamless integration of 4-5 Plaid services to facilitate secure connection with users' bank accounts
- Engineered innovative features empowering users to create goals and work towards reducing debt or saving money

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

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

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

- Led end-to-end development and launched digital contract-based hiring platform, garnering 3000+ sign-ups in 4 weeks
- Deployed robust payments and communication system using Python & cron-jobs resulting in 33% weekly returning users
- Optimized server load by 30% and ensured rapid scalability using 5+ cloud services, handling 100 users/sec at peak

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

- Built a low-latency Elasticsearch search engine, leading to 12% increase in item additions with improved accuracy
- Scraped data from 7+ disparate sources using Selenium to populate database with 200,000+ grocery products

PROJECTS

Elogos Collaboration Tool — Research Assistant　　　　　　　　　　　　Jan '23 - Present

- Collaborated with professor to develop an annotation tool on top of an existing platform, fostering knowledge sharing
- Implemented OAuth module for secure client-server communication and upgraded chrome extension to version 3
- Utilized Python Pyramid, PostgreSQL, Bootstrap CSS and JavaScript to deliver admin tools for rubric management

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 — Research Assistant　　　　　　　　　　　　　　　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 in-between
- Acquired knowledge of project management, C# language, & virtual reality engine to simulate behavior of elements

SKILLS

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