**Suyash Nagumalli**

Urbana, IL ● +1 (217) 819-9253 ● [usasuyash@gmail.com](mailto:usasuyash@gmail.com) ● [linkedin.com/in/suyashnagumalli/](http://www.linkedin.com/in/suyashnagumalli/) ● [suyashn.myportfolio.com](https://suyashn.myportfolio.com/)

EDUCATION

|  |  |
| --- | --- |
| **University of Illinois at Urbana-Champaign** Grainger College of Engineering | Expected May 2025 |
| B.S-M.C.S. 5-year program in Computer Science - Intelligence and Big Data specialization | GPA: 3.7 / 4.0 |

SKILLS

**Languages**: Proficient: Python (6yrs), C++ (3yrs), MySQL(2yrs), C# (2 yrs) Familiar: Dart, Go, TypeScript, Java, JavaScript

**Technologies**: Langchain, LlamaIndex, Elasticsearch, Pytorch, Tensorflow, Streamlit, Sklearn, NumPy, Pandas, CV2, Pillow, cuda, HuggingFace, Unity, VR, ReactJS, Linux, Docker, Jenkins, AWS EC2, GitHub, VS Code, FastAPI, Flutter, Swift, Jira

**Graduate Courses:** LLM post pre-training, 3D Vision, Social and Information Networks

**Undergrad Courses:** Machine Learning, Applied Machine Learning, Deep Learning in Computer Vision, Artificial Intelligence,

Linear Algebra, Numerical Methods, Algorithms, UI Design, Quantum Computing, Data Structures, Database Systems, Internet of Things, Audio Computing Lab, Compilers, CS Ethics, Probability and Stats, Computer Architecture, Calculus, Leadership

EXPERIENCE

|  |  |  |
| --- | --- | --- |
| **AbbVie** – Pharmaceutical Company | Champaign, Illinois | |
| AI Engineer Intern | Nov 2023 - Present | |
| * Designing and deploying innovative end-to-end fullstack genAI tools with CI/CD to solve business problems * Creating and maintaining Elasticsearch vector databases using HuggingFace embeddings * Developing and evaluating retrieval augmented generation (RAG) pipelines’ performance on expert data * Leveraging llamaIndex, Langchain, Pandas, and state-of-art vision models and LLMs via Python * Coordinating with stakeholders in a dynamic role to pitch and deliver four projects over eight months | | |
| Software Engineer Intern | Aug 2023 – Nov 2023 | |
| * Built a google-lens like streamlit web app for translating images and documents in place * leveraged AWS Textract, translation APIs, cv2 and Pillow python libraries, to get 0.5x speedup than industry | | |
| VR Developer Intern | Jan 2023 – Jul 2023 | |
| * Developed a Meta Quest 2 VR app in Unity for simulating patient-doctor interaction in clinical trials * Leveraged a pretrained GPT3.5 turbo LLM and prompt engineering techniques and NLP * Integrated STT and TTS models in Python FastAPIs to call in C# scripts to achieve real-time patient interactions | | |
| **Department of Computer Science –** UIUC | Champaign, Illinois | |
| Course Assistant - CS 411 Database Systems | Jan 2022 – Dec 2022 | |
| * Led a class of 200 students in Lab Discussions in Database concepts, graded homework | | |
| Course Assistant - CS 173 Discrete Structures | Jan 2021 – Dec 2021 | |
| * Managed lab discussions, held office hours, graded assignments, and proctored exams\ | | |
| **Grainger Engineering Library –** UIUC | | Champaign, Illinois |
| Student Assistant – Circulation Desk | | Jun 2022 – May 2024 |
| * Aided patrons in loaning materials, directions, and library technology issues * Answering telephones and taking messages; Organizing library resources | | |
| **HealthCare Engineering Systems Center –** UIUC | Champaign, Illinois | |
| VR Research Intern **–** Extra-Corporeal Membrane Oxygenation (ECMO) Project | Jun 2022 – Jul 2022 | |
| * Developed a VR learning module in Unity for the ECMO machine to train doctors at OSF healthcare * Collaborated with doctors and 3D artists, understood clinical requirements, and implemented needs into VR software | | |
| **Beulr**– Zoom Meeting Transcriber | SanFrancisco, California | |
| Independent Contractor – Frontend Web Development | Dec 2021 – Apr 2022 | |
| * Deployed frontend components for the Calendar List View using ReactJS to 10,000+ users * Coordinated with a team of five developers across time zones to push features for the Shark Tank demo | | |
| **Showingly** –Showing Management Platform | Denver, Colorado | |
| Software Development Intern – Web Development | Jun 2021 – Aug 2021 | |
| * Built a customer resource management page using React and MongoDB using Agile methodology * Learnt react-redux and stitch function syntax on the fly, publishing bug fixes within the first 2 weeks | | |
| **BubbleMeets** – Virtual Event Hosting Platform | Urbana, Illinois | |
| Entrepreneur, Developer | Sep 2020 – Oct 2021 | |
| * Worked on product development and management of interns from UChicago, Stanford and MIT * Pitched the product to various venture capitalists and start-up accelerators | | |

|  |  |
| --- | --- |
| **Independent Musician** | Aug 2022 – present |
| * Writing, singing, and producing original songs, remixes and covers with ~ 15,000 total streams * Managing social media presence, branding, fan engagement, marketing and project management | |

PROJECTS

|  |  |  |
| --- | --- | --- |
| **Considerthis.ai** UC Berkeley AI Hackathon [Devpost](https://devpost.com/software/consider-this) | | July 2024 |
| * An emotionally intelligent multi-agent conversation tool used by educators to empower students to stay relentlessly curious; worked with students from UCBerkeley, UWashington, CUBoulder; Leveraged Hume.ai, ReactJS, Supabase | | |
| **Stock Market Analysis Dashboard** Github | | Jan 2024 |
| * Developed a Streamlit web app fetching stock data from Yahoo Finance API and visualize using plotly * Implemented sentiment analysis of news headlines using NLTK, into to financial data analysis and trading concepts | | |
| **House Price Regression** ML group project [Docs](https://docs.google.com/document/d/1_zcy1VZTOfGveNvM_K-lntp2uQrTXXms2F4YjkuhW54/edit?usp=sharing) | | Apr 2023 |
| * Predicted house sale prices given a dataset of house sale data * Selected relevant features, cleaned dataset, Tested KNN, Lasso and Ridge linear regression to compare RMSE scores | | |
| **Crop Yield Prediction** HackIllinois 2023 [Devpost](https://devpost.com/software/crop-yield-prediction-ce9x6n) | | Feb 2023 |
| * Predicted the crop yield from land based on soil and yield data from John Deere * Trained a Decision Tree Classifier ML Model and built a frontend visualization in ReactJS and CSS | | |
| **Spndmate** HackIllinois 2024 [Devpost](https://devpost.com/software/spndmate) | Feb 2024 | |
| * A fresh perspective to group-bill splitting and personal budgeting for young adults, powered by Splitwise * An Android/iOS app built using Flutter, Android emulator and Material UI, with Google Sheets backend API | | |
| **Dumstr** UI design group project [Slideshow](https://docs.google.com/presentation/d/1NWBQLSzvgOGBHayKl5xRV5tL7vMCtOa2rdNeE1EkIaY/edit?usp=sharing) | | Dec 2023 |
| * A marketplace for students to give away and collect reusable items for free, built using Flutter | | |
| **Remage** BuildIllinois 2023 [Website](https://remage.pages.dev/) | | Nov 2023 |
| * An open-source, modular toolkit that transforms images into interactive, map-like components * Developed using TypeScript and React, with Tailwind CSS | | |
| **Spotify LED Controller** IoT group project[Docs](https://docs.google.com/document/d/1FZZr3KRzC2Mpgl84gQ1T3HsgTT4uAc6V/edit?usp=sharing&ouid=112766693837551945990&rtpof=true&sd=true) | | May 2023 |
| * Syncs your room’s LED colors based on your Spotify tracks, enhancing user immersion * Written in Go on a Raspberry Pi, uses Spotify API, Bluetooth, and a custom song coloring algorithm | | |
| **Pokémon Type Advantage Visualization** [GitHub](https://github.com/faddock/Pokemon-Type-Advantage-Graph-Visualization) | | Jan 2022 |
| * C++ Visualization that attempts to compare Pokémon strength based on their Type * Uses Force-Based Graph Visualization and Graph Coloring to investigate Pokémon Type advantages | | |
| **Graph Coloring Visualizer** [GitHub](https://github.com/faddock/graph-coloring-visualizer) | | May 2021 |
| * Developed a backtracking algorithm to calculate the Chromatic Number of a graph * Helped students visualize and learn Graph Coloring concepts in CS 173 - Discrete Structures as a Course Assistant | | |
| **CTAssist** HackIllinois 2021 [Devpost](https://devpost.com/software/ctassist-2qu54h) | | Apr 2021 |
| * Smart Wheelchair-accessible Navigation system for public transport commuters in Chicago * Uses the CTA Transit, Customer Alerts, and Google Maps APIs to calculate most efficient route | | |

LEADERSHIP & VOLUNTEERING

|  |  |
| --- | --- |
| **Engineering Open House – Student Organization**, Volunteer | Apr 2022, Apr 2024 |
| * Managed the Lego Design Lab robots with empathy to children and parents (2024) * Helped set up tables and stands for EOH exhibits in 2 buildings based on floor plans (2022) | |
| **Open Source at Illinois** – **Student Organization**, Membership Chair | Sep 2021 – May 2022 |
| * Organized weekly workshops on topics like REST and Git, and networked to increased student membership * Revived an inactive club through awareness and marketing to raise its weekly attendance by fivefold in two semesters | |

HONORS

* Won Research Park “Best Business Innovation” Award with AbbVie – 2023
* Ran the Illinois Christie Clinic half-marathon in 2 hours 18 minutes - 2024
* Won the “Founders - 54 Startup Weekend” pitching competition at UIUC - 2021
* Finalists in “Forge” – the largest student-run startup weekend in the Midwest - 2020
* Secured International rank 150 in National Cyber Olympiad - 2019
* Bronze - International Piano Competition - World Piano Teachers Association (WPTA) Singapore – 2019
* Completed Grade 8 Trinity College of London Piano Examination – the highest grade

PROFESSIONAL DEVELOPMENT

|  |  |
| --- | --- |
| **Bloomberg Market Concepts**, Bloomberg LP | Certified: Jan 2023 |
| A comprehensive online course covering economics, currencies, fixed income, and other financial market concepts, with a focus on practical applications in the financial industry | |