HRISHIKESH PAUL

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EDUCATION

Indiana University Bloomington   *Bloomington, IN*
Master of Science in Computer Science | GPA: 4/4   *Aug 2019 - Expected May 2021*
- Relevant Courses: Software Engineering, Operating Systems, Algorithms, Artificial Intelligence, Experience Design

Manipal Institute of Technology   *Manipal, India*
Bachelor of Technology in Computer and Communication | GPA: 8/10   *Aug 2015 - Jul 2019*
- Relevant Courses: Software Engineering, Data Structures, OOP, Algorithms, Networks, Data Mining, HCI

SKILLS

Languages: Python, JavaScript, TypeScript, C/C++, Java, NoSQL, SQL,

Web Technologies: Vue, Angular, Node, Flask, HTML5, CSS3, REST; Familiar with React, Ionic

Databases: MongoDB, MySQL, Firebase; Previously used OracleSQL, Neo4j

OS/Tools: MacOS, Linux, Git, Agile (Scrum), Heroku, AWS, Docker, MVC

RELEVANT EXPERIENCE

Cyberinfrastructure for Network Science Centre (HuBMAP)   *Bloomington, IN*
Research Assistant; Software Developer | Angular, Typescript, Node, Shell, Vega   *May 2020 - Present*
- Built state of the art visualization tools for a program funded by the NIH, for researchers and doctors from multiple consortia to envision large biological datasets.
- Devised an algorithm to compute statistics that highlight anomalies in the data and display them on an intuitive interface.
- Pioneered a visualization that clumped a partonomy tree and a bimodal network together to help experts gain valuable insights from large biomedical datasets.
- Created detailed UX flows, wireframes and prototypes to optimize screen space and enhance user experience.

Skylark Drones   *Bangalore, India*
Software Engineering Intern | Vue, Flask, MongoDB, Nginx   *Jan 2019 - Jun 2019*
- Developed a web app for mission planning, control and execution, improving onsite project performance by 22%.
- Resolved 50+ technical issues while installing 10+ design and functional enhancements to legacy code.
- Integrated an auto-documentation system for the backend APIs, thereby increasing user adoption by 40%.

Hridayam Soft Solutions   *Mumbai, India*
Software Engineering Intern | Angular, Node, Python, OpenCV, Tesseract   *May 2018 - Jun 2018*
- Scripted an algorithm for extracting details from images of invoices using numerous Computer Vision techniques.
- Designed an intuitive web platform and developed multiple APIs to display the results, achieving an accuracy of 80%.

ACADEMIC PROJECTS

NoQ Job Portal   *Project, IUB*
Project Lead; Winner out of 12 projects | Vue, Node, MongoDB, Heroku   *Aug 2019 - Dec 2019*
- Constructed a web app for career fairs to bridge the gap between employers and students by effectively matching them.
- Engineered a smart-filtering algorithm to reduce queues at career fairs, by selecting students based on qualifications.
- Conducted unit, black/white box and integration testing, and resolved 30+ issues raised by customers.

Part of Speech Tagger   *Project, IUB*
Project Lead | Vue, Python, Flask, Numpy, Heroku   *Oct 2019 - Dec 2019*
- Modeled an algorithm for part of speech tagging of words of a sentence by comparing various probabilistic models.
- Proposed 3 learning models using Bayes Nets, Viterbi and MCMC for word tagging and achieved an accuracy of 90%.

Sentiment Analyzer   *SIH, 2018*
Finalist of the Smart India Hackathon | Angular, Node, MongoDB, Python, Keras   *Mar 2018 - Apr 2018*
- Implemented clustering for problem binning and demonstrated the results on a use-case tailored web app.
- Performed problem extraction and policy satisfaction of citizens, based on sentiment analysis of tweets, and achieved a sentiment accuracy of 91%.

Requiry   *MIT, 2016*
Winner of Microsoft's Online Hackathon | Android, Java, SQL, Azure   *Sep 2016 - Oct 2016*
- Developed a mobile platform for research-oriented students to collaborate with professors and students alike.
- Analyzed data collected by surveying 370 students and professors to identify product requirements and the audience.