ARYAMAN DWIVEDI

(609) 414-2021
dwivedi6@illinois.edu

github.com/ary-dz
linkedin.com/in/ary-dz
ary-dz.github.io

EDUCATION

University of Illinois at Urbana-Champaign
BS Computer Science **May 2025**
Minor in Mathematics **GPA: 3.88**

EXPERIENCE

Adobe Inc **MAY 2024 — AUGUST 2024**
Software Engineer Intern *San Jose, CA*
- Streamlined form filling experiences for users with multi-recipient forms using Adobe React Spectrum components
- Developed automatic form field placement walkthrough, ensuring real-time updates with optimized Redux state management
- Upgraded ML architecture by expanding training dataset and applying combination of models with ensemble learning
- Boosted Inference accuracy by $\approx 25\%$ and rolled out the new models to 5% of Acrobat users in Production
- Observed a reduction of $\approx 20\%$ in detected field type error, enabling faster field placement and lesser user intervention

iSENS Research Lab **JANUARY 2024 — Present**
Undergraduate Research Assistant *Champaign, IL*
- Researched methods on indoor localization of a mobile device using RGBD cameras and 6DOF sensor fusion methods
- Designed a data acquisition setup for wireless network data, with an iRobot Create 3, WiFi Routers, and ROS2
- Explored preliminary visualization methods for tracking a dynamic object and fusing corresponding wireless data
- Maintained the Research Group's website built on React.js and enabled continuous deployment for the website on cPanel

Illinois Applied Research Institute **FEBRUARY 2023 — DECEMBER 2023**
Undergraduate Research Assistant *Champaign, IL*
- Replaced cluttered and confusing UI with an intuitive and user-friendly design into platform to streamline user experience
- Created a comprehensive cohort management system, empowering nutritional scientists to efficiently track participant data
- Implemented a robust messaging system in Flask, facilitating streamlined communication to enhance research effectiveness
- Enhanced administrative tools with additional features while optimizing user-friendliness, improving efficiency and ease of use

Illinois Space Society (ISS) **NOVEMBER 2021 — Present**
Chief Ground Station Engineer *Champaign, IL*
- Led the ground operations team at Spaceport America Cup, where ISS placed 2nd in the 30k COTS category
- Developed a modern Ground Station Software using TypeScript and Electron.js to visualize flight telemetry in real-time
- Engineered an efficient custom packet structure, similar to JSON, to enhance communication rate by 50 percent
- Used PlatformIO to write embedded software for Long Range Radio using C++ to transmit critical telemetry during flight
- Enhanced data visualization capabilities using Chart.js, effectively rendering multiple data sets with minimal memory usage
- Integrated an offline GPS solution using Leaflet.js to ensure accurate tracking and reliable recovery of the rocket after landing

UOLO PVT LTD **DECEMBER 2019 — AUGUST 2020**
Full-Stack Intern *Bangalore, India*
- Produced a timetable scheduling project for school administrators, automating the generation of institution-wide timetables
- Built a dynamic frontend using Vue.js, incorporating Axios to handle AJAX commands and deliver seamless user interactions
- Utilized Flask to power the backend, leveraging its efficient routing and server capabilities for optimal performance
- Employed Genetic Algorithms in Python to generate five valid alternative timetables, expanding options for administrators

EZEPARK **JUNE 2018 — AUGUST 2018**
Software Developer *Bangalore, India*
- Developed a mobile app prototype aimed at mitigating traffic issues through license plate scanning of illegally parked vehicles
- Efficiently developed a cross-platform app using React Native, enabling simultaneous deployment on iOS and Android
- Leveraged Google Cloud Platform's Cloud Vision API to implement license plate number extraction from user-captured images
- Optimized the app's performance by using cloud APIs and reducing reliance on local libraries for a lightweight solution
- Achieved report submission times of under 1 minute and integrated with the police database to expedite official responses

SKILLS

Programming	JavaScript/TypeScript • C/C++ • Python • Java • Verilog • HTML & CSS • SASS • PHP • SQL
Web Frameworks	React.js • Electron.js • Vue.js • Flask • Django
Miscellaneous	Redux • Arduino • PlatformIO • Linux • KiCad • NumPy • Pandas • Shell • LaTeX • Firebase •Git • CI/CD
Communication	English • Mandarin • Hindi