Akashranjan Singh

Bio: I am a final year B.Tech student at NIT Trichy.

Github: github.com/akashranjan027

Email: akashranjan027@gmail.com
Mobile: +91-775-6069-556

EDUCATION

- **National Institute of Technology**
  Trichy, India
  Bachelor of Technology - Electronics and Communications Engineering; CGPA: 8.02
  July 2019 - June 2023
  Courses: *Operating Systems, Data Structures, Machine Learning, Networking, Databases*

SKILLS SUMMARY

- **Languages:**   C++, JavaScript, SQL,Python, PHP
- **Frameworks:**   NodeJS, ReactJS, ExpressJS, TensorFlow, Keras
- **Tools:**   GIT, MongoDB, MySQL
- **Platforms:**   Linux, Web, Windows, Arduino
- **Soft Skills:**   Leadership, Public Speaking

EXPERIENCE

- **Research Internship at NIT-Trichy**
  Trichy
  Research Intern (Full-time)
  May 2022 - July 2022
  - **Single-image Deraining**: Solved the issue of very deep running Models using State-of-the-art Vision transformers.
  - **Vision Transformers**: Improved upon the existing technology of Vision Transformers which allow better results in limited Computational capabilities.
  - **Multi-Dconv Head**: Implemented a Multi- Deconvolution Head attention to significantly improve the performance.
  - **Gated Dconv**: Implemented a Soluion similar to Residual networks for Vision transformers.
  - **Results**: Obtained a PSNR greater than 33 db on the Rain100L,Rain100H datasets improving on previous similar research.

PROJECTS

- **Lab Buddy - Resource Booking website (Web Development)**: (Work in progress)
  - **Tech**: NodeJS, ReactJS, ExpressJS, JWT, MongoDB
  - **Slot System**: Implemented a slot based System for the DL laboratory for better management of available Computational resources.
  - **Authentication and Authorization**: Built in NodeJS with ExpressJS handling all the APIs and JWT was used to solidify the Authentication part.
  - **Database**: Implemented and maintained the various CRUD operations on MongoDB Atlas Cloud .

- **Hello Buddy - Chat website (Web Development, WebSockets)**:
  - **Tech**: NodeJS, ReactJS, ExpressJS, JWT, MongoDB
  - **Frontend**: Front-end was built using ReactJS with the help of Chakra UI library for personal as well as Group Chats.
  - **Authentication and Authorization**: Built in NodeJS with ExpressJS handling all the APIs and JWT was used to solidify the Authentication part.
  - **Database**: MongoDB Atlas was used as the Database Server for this Project.Various CRUD operations implemented.

- **Voltic (Smart E-Grid Dashboard,Recharts ,IoT)**:
  - **Tech**: NodeJS, ReactJS, ExpressJS, MongoDB
  - **Dashboard**: Built using ReactJS with the Chakra UI library.Recharts library was used to include various charts.
  - **REST APIs**: Built in NodeJS with ExpressJS handling all the APIs performing all the analytics.
  - **Database**: MongoDB Atlas was used as the Database Server for this Project.CRUD operations were followed .

- **Ecommerce Website (Website Development, Shopping website)**:
  - **Tech**: HTML, CSS, JavaScript
  - **Frontend**: Built using HTML, CSS , JavaScript. Implemented Responsive design using Bootstrap and CSS.

ACHIEVEMENTS

- Secured AIR 9 in CodeChef June Long Two challenge among 2800+ participants.
- Secured AIR 123 in CodeChef Starters 44 among 10,000+ Participants.
- Secured Rank 19 in MTSE(Maharashtra Talent Search Exam) in the State level conducted by Centre for Talent search and Excellence, Pune - 2016

VOLUNTEER EXPERIENCE

- **Executive Committee member, NSS**
  Worked as a ExCom in NSS, National Service Scheme, handling and managing all the schedules of events and programmes

- **Coordinator, Publicity Team, Probe**
  Coordinator of Publicity Team of Probe, the National level technical symposium of department of ECE, NIT Trichy.