Som Wakdikar

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EDUCATION

B.S., The University of Texas at Austin, Austin TX (Class of 2024) **Aug 2021 – May 2024**
- Electrical & Computer Engineering, Software Engineering and Design
- Overall GPA: **3.94**/4.00, 5 semesters, 2.5 years graduation

Honors Diploma, Texas Academy of Math and Science, Denton TX (Grades 11th, 12th) **Aug 2019 – May 2021**
- Overall GPA: **3.95**/4.00, Early college program
- Awarded for exceptional academic performance and completing 475 community service hours

EXPERIENCE

Software Engineering Contractor Intern, @ NASA **May 2023 – Aug 2023**
- Cost-free solution to provide the CST ground flight-control team with imagery from Boeing's Starliner
- Developed a wiki extension to export Artemis II+ crew training material to international partners (IP)
- Pioneered a VR ISS experience, established a web application, added features to flight displays, wiki projects, etc.

Systems/Software Engineering Intern, @ NASA **Jan 2023 – May 2023**
- Solved complicated deployment issues regarding discrepancies between crew and ground displays by thoroughly understanding the architecture of software deployment for mission control displays
- Solved multiple issues with flight camera displays regarding ISS overlays discrepancy. Required thorough analysis of python and proprietary code variables/computations in a Linux-based environment

Propulsion Team Leader, @ Design Build Fly (DBF) @ UT **Aug 2021 – Jan 2023**
- Published a design proposal and report and placed in top 10 in the international DBF competition hosted by AIAA
- Optimized propulsion system selection, testing, power management, wiring, wind tunnel testing, data analysis, prop. balancing, receiver programming
- Singlehandedly, promptly, fabricated a working parcel deployment system to complete the mission for the remote-controlled aircraft after other plans were unsuccessful

Engineering Research @ TAMS (Scholarship for Summer Research) **Dec 2020 – Aug 2021**
- Stress/strain analysis, created and tested cold-formed steel structures, modeled a 155-unit apartment building
- honors.unt.edu/scholars-day/som-wakdikar

SKILLS

- Python, Java, C, C++, JavaScript, Julia, Linux, Agile, GitLab/GitHub, Bash, Unity (VR), CI/CD integration, React.js
- Excellent at anticipating, identifying, and correcting potential problems and risks in a complicated system
- Design and **detail-oriented**, adaptive learner, **problem-solver**, teamwork, eager to learn
- **Engineering Courses:** Software Implementation/Design I & II, Software Lab, Algorithms, Data Science Lab, Software Architectures, Senior Design I & II, Embedded Systems I & II, Circuit Theory, Digital Logic Design, Signals & Systems, Intro to Electrical Engineering, Intro to Computing, Discrete Mathematics, Engineering Communications, Computer Vision, Intro to Machine Learning, Information Security and Privacy
- ARM Assembly, MATLAB, Verilog, PCB designing, Autodesk Eagle, Autodesk Revit, Abaqus FEA, Adobe Photoshop, Adobe After Effects, 2D/3D art, Machine workshop certified, OSHA certified, wiring, soldering, micro-soldering, woodwork, metalwork

PROJECTS

- HW Checkout: Leveraged MongoDB, Heroku, Flask, and JavaScript to create and deploy a full stack web application
- Kaggle Competition: Placed **2nd** in Data Science Lab class competition for binary classification
- Weather Application: Java, Android Studio, Google APIs, Weka and tested on an android smartphone
- Quantum Transport: Honors Senior Design Project written using Julia. Refactored codebase with modularization, CI/CD, FOSS practices, documentation, and implemented a faster matrix inversion algorithm
- Augmented Welding: Computer Vision project using Python, OpenCV to simulate a welding path
- 2 Projects, Embedded Systems: communicate between two devices using RF technology; replicate a popular game
- Earthquake Prediction: Python machine learning model to predict building damage after an earthquake