

SOWNDARYA KRISHNAN NAVANEETHA KANNAN

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Seeking full-time positions (May 2025).

EDUCATION

Colorado School of Mines, MS in Computer Science | Colorado, USA GPA: **3.7 / 4.0** May 2025
Anna University, B.E in Electronics & Communication Engineering | Chennai, India GPA: **8.56 / 10** Aug 2022
Relevant Courses: Algorithms, Principles of Programming Languages, Operating Systems, Advanced Computer Architecture, Discrete Math, Advanced Machine Learning, Theory of Computation

RESEARCH EXPERIENCE

DATA-DRIVEN CPS LAB, Research Assistant | Golden, CO Aug 2023 – Present

- Researching SHACL validation and inference under Dr. Gabe Fierro, focusing on RDF graph acceleration.
- Developing a novel algebra to streamline SHACL operations and enhance validation processes.

Technologies used: RDF, SHACL, SHACL-AF, Python, Git, Linux, Bash

SLOAN PROJECT, Full Stack Developer | Leadville, CO Aug 2023 – Present

- Collaborated with Mechanical and Electrical Engineering teams to develop backend and frontend solutions for managing community energy consumption data.
- Architected backend solutions for handling large volumes of data, allowing customizable data retrieval.
- Built and enhanced a community dashboard with real-time visualizations, ensuring usability and accessibility for all users.

Technologies used: Backend — VPN, Docker, PostgreSQL, Firebase, Grafana | Frontend — React, Firebase, AWS SNS (in progress)

The frontend system webpage is confidential.

BRICKSCHEMA ONTOLOGY, Contributor | Remote June 2024

- Developed and integrated a search functionality using Fuse.js, solving a long-standing issue, now widely used by scientists globally for efficient RDF data querying.

Technologies used: JavaScript (Fuse.js), RDF, SHACL, SHACL-AF, Python, Git

PROFESSIONAL EXPERIENCE

NCOMPASS TECH STUDIO PVT. LTD, Mobile Engineer, Frontend Engineer & Cloud Engineer | Chennai, India May 2021 – May 2022

- Developed mobile apps & cloud solutions using Kotlin, Flutter, & Android dev.
- Led UI change for Android app, resulting in 1,000+ downloads increase on Play Store.
- Developed custom components, driving 25% increase in integration across business groups.
- Proficient in Git, unit testing, & TDD, ensuring 98% bug-free release.

Technologies used: Android App Dev, Kotlin, Flutter, JavaScript (Node.js, React), App Dev, AWS, Terraform, Java, Python, Firebase, Git, Docker, Grafana, Jira, DevOps, Linux, SQL, HTML/CSS

SKILLS

Programming	Python, Flutter, Android app development, Linux, SQL, Java, C, JavaScript (Node.js, Nest.js, Angular.js, React, TypeScript), Firebase, Git, DevOps, AWS, Terraform, HTML/CSS, Docker, Grafana, SHACL, SHACL-AF, MS Office, OCaml, LISP, LaTeX
Certifications	Cyber Security: From Beginner to Expert (Udemy), Machine Learning, Cryptography & Introduction to Statistics (Stanford University), Introduction to Data Science in Python (University of Michigan)

NOTABLE AWARDS & PARTICIPATION

UNDERGRADUATE RESEARCH SYMPOSIUM, Judge | CO, US April 2022
Judged research poster presentations.

ECHOES OF EQUALITY, BlasterHacks Hackathon Winner | Colorado School of Mines Feb 2022
1st Place in Beginner Category & LGBTQIA+ Category for developing an impactful social platform.

MEENAKSHI SUNDARARAJAN ENGINEERING COLLEGE, Hostel Representative & Vice President, ECE Department | Chennai, India Aug 2018 – July 2022
Led departmental initiatives & events as Hostel Representative & Vice President. Organized college symposium as Coordinator, hosting events & games, providing a platform for students to showcase talents to a diverse audience from various universities & institutions.

To know more about my projects, please check out my **GitHub**.