

Pranavi Ram Lakshminarayanan

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EDUCATION

- **Brown University** — B.S. in Computer Science **Providence, RI | Graduation: May 2026**
 - GPA: 4.0/4.0
 - **Related Course Work:** User Interface/User Experience, Introduction to Software Engineering, Program Design with Data Structures and Algorithms, Computer Vision
- **Academy of Science** — Advanced Studies Diploma **Leesburg, VA | Graduation: Jun 2022**
 - GPA: 4.66/5.0
 - Research-based high school for science and math

WORK EXPERIENCE

- **Data Science Intern (remote), Town of Cary** **Chantilly, VA | Jun – Aug 2023**

Web Programming:

 - Collaborated with mentor to provide town residents with local transportation data
 - Modeled datasets as 16+ dynamic graphs using Pandas and Plotly Python libraries
 - Improved UI design of town website with new CSS font styling

Tutorials:

 - Taught colleagues Python basics with interactive Jupyter notebooks
- **Cybersecurity Intern, ManTech** **Chantilly, VA | Jun – Aug 2021, Jun – Aug 2022**

File Format Reverse Engineering:

 - Reverse-engineered malware using Ghidra to understand methods and motive of cyberattack
 - Analyzed encrypted files with hex editors to determine encryption algorithms used

Cryptography:

 - Created 6 Python programs to encrypt/decrypt files with symmetric algorithms (AES, XOR, base64)
 - Documented 5+ projects in technical write ups

RESEARCH EXPERIENCE

- **Visual Cryptography for Colored Images** **Leesburg, VA | Sep 2021 – May 2022**
 - Developed XOR-based encryption scheme with Python to encrypt/decrypt colored images
 - Analyzed robustness of cryptography scheme with MATLAB and statistical tests
 - Won 3 awards at 2022 Loudoun County Regional Science & Engineering Fair

PROJECTS

- **Artist's Corner PVD** **Providence, RI | Dec 2023**

GitHub Link: <https://artistscornerpvd.github.io/>

 - Technologies used: TypeScript, React.js, Node.js, Vite, Figma, MongoDB
 - Led 4-person team to build and deploy consignment site for students to sell handmade goods
 - Designed webpage mock-ups with Figma to ensure user-friendly experience
 - Stored 50+ item and account objects in scalable MongoDB database
- **Maps** **Providence, RI | Nov 2023**

GitHub Link: <https://prlakshm.github.io/maps/>

 - Technologies used: Mapbox, TypeScript, React.js, Node.js, AWS
 - Implemented interactive map that displays U.S. Census broadband access data
 - Consulted stakeholders to address and fulfill website requirements
- **Read-Eval-Print-Loop (REPL)** **Providence, RI | Oct 2023**

GitHub Link: <https://prlakshm.github.io/repl/>

 - Technologies used: Java, Apache Spark, Express, TypeScript, React.js, Node.js, Screen Reader
 - Produced app with web accessibility that loads and searches csv files, displaying results as table

TECHNICAL SKILLS

- **Languages:** Python, Java, JavaScript, TypeScript, HTML, CSS, MATLAB
- **Frameworks/Cloud Services:** Node.js, Express, Apache Spark, Django, AWS
- **Operating Systems/Editors:** Windows, MacOS, Linux, VS Code, IntelliJ IDEA