

MAKILAN BALASUBRAMANIAN

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🌐 [makilan-bala](https://makilan-bala.github.io)

🔗 [MakilanBala](https://github.com/MakilanBala)

EDUCATION

University of Maryland

Bachelor of Science, Computer Science

Concentration: Machine Learning

Minor: Innovation and Entrepreneurship

Expected Graduation: May 2026

Aug 2022 – May 2026

College Park, MD

CERTIFICATIONS

- C Certified Entry-Level Programmer (C++ Institute)
- Python Certified Entry-Level Programmer (Python Institute)
- Amazon Web Services (AWS) Cloud Practitioner Certification
- BLS (Basic Life Support) for CPR certificate

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript, OCaml, Racket, Rust, SQL, MATLAB

Developer Tools: VS Code, Android Studio, Eclipse IDE

Technologies/Frameworks: Linux, GitHub, Git, ReactJS, NodeJS, ExpressJS, MongoDB, Amazon Web Services (AWS)

AI Tools/Frameworks: TensorFlow, PyTorch, scikit-learn, SciPy

Other: Agile Methodologies, SDLC, Computer-Aided Design, Arduino Microcontrollers, Microsoft 365, HTML/CSS

PROJECTS

Touching-Grass | [React Native](#), [ExpressJS](#), [NodeJS](#), [MongoDB](#)

In Progress

- Designed a mobile app with React Native that encourages outdoor activities by allowing users to share and view location-based photos, using Google Maps API and MongoDB for backend support.

Cheat Card Game | [Java](#)

April 2022

- Designed a console-based Java program that allows users to play the card game "Cheat".

C Shell | [C](#)

Aug 2024

- Designed a Shell using C and implemented functionality such as process management, piping, and I/O redirection.

EXPERIENCE

First Year Research Experience, University of Maryland

Aug 2022 – Aug 2023

Research Student

College Park, Maryland

- Learned the basics of quantum computing and machine learning through hands-on projects.
- Gained experience using Google Colab and PyTorch for machine learning tasks.
- Synthesized information on various machine learning and quantum computing topics and presented my research findings clearly to the entire research class.

Palantir Winter Fellowship

Dec 2024 – Jan 2025

Fellow

Virtual

- Gained hands-on experience with Palantir Foundry to integrate, analyze, and visualize large-scale datasets.
- Designed a data-driven college selection tool using College Scorecard data, generating meaningful insights and providing users with AI-powered recommendations and interactive widgets for a holistic decision-making experience.

Shangri-La Assisted Living

Aug 2024 – Present

Volunteer

Ellicott City, Maryland

- Facilitated recreational activities such as bingo, contributing to the mental well-being of elderly residents.

EXTRACURRICULAR

- Leatherback Combat Robotics
- National Technical Honor Society (Previous)
- Science Olympiad (Previous)
- Varsity Cross-country/Track and Field (Previous)