

## Akshaya P. Raghavan

<https://www.linkedin.com/in/akshaya-p-raghavan-661410142/>

331-814-7702 | apr65@cornell.edu

### Education

**Cornell University**, Bachelor of Science in Engineering, **Computer Science and Data Science**, College of Engineering, Ithaca, NY (May 2023)

**Select Courses:** Data Science, Machine Learning, Functional Programming & Discrete Structures, Introduction to Algorithms, Natural Language Processing, Object Oriented Programming, Linear Algebra

**Columbia University:** Accounting and Finance for the Nonfinancial Professional (Certificate), Spring 2022

### Skills

**Programming Languages:** Python, C++, Java, Typescript, SQL, C#, Swift 5, Swift UI, JSON, OCaml, R, Shell scripts

**Operating Systems:** Robotic Operating System, Linux

**Web Development:** NodeJS, NPM, HTML, CSS

**Software:** AWS Lambda, AWS API Gateway, AWS DynamoDB, Cloud Fast Track, Cloud Development Kit, Arduino, Unity, Raspberry Pi, Git, GitHub, SDLC, Agile, NLTK, .NET, PyTorch, TensorFlow, Firebase, Jupyter Notebooks, Microsoft Office, Pandas, MATLAB, Eclipse

### Relevant Work Experience and Projects

**Software Engineering Intern** – Goldman Sachs, Inc June 2022 – Aug 2022

- Developed solution for data sourcing as a part of Compensation Accounting Engineering AWS re-architecture
- Implemented data transformation and validation, created infrastructure as code using Cloud Development Kit and internal GS product for guardrails; developed API endpoint with authentication using API Gateway, Lambda function for hosting code; logged data in DynamoDB for analytics and error management

**Data Science and Machine Learning Intern** – Regeneron Pharmaceuticals, Inc Jan 2022 – May 2022

- Estimated rate of an off-target effect of CRISPR gene editing using machine learning
- Conducted feasibility study to check for evidence of effect and performed model selection and feature extraction and selection
- Regeneron is applying for a patent for this method

**Team Lead** (previously Navigation Subteam Lead) – Cornell University Autonomous Bicycle Project Oct 2019 – Present

- Assess and reset strategic direction for team, manage six subteams; recruit and induct talented team members
- Designed algorithms for path optimization, traffic light navigation and path tracking. Achieved 95% success rate
- Worked on obstacle avoidance algorithm using data from neural network, **LiDAR** and **pointclouds** (software); **ML algorithm** for minimizing travel time to increase battery efficiency; virtual bike for testing using **RVIZ**; programming in **C++**, **Python**

**App Development** – Rethink Numeracy, Independent Project June 2021 - Present

- Currently developing an app (**Swift 5/SwiftUI/SQL**) specifically designed for children with Down syndrome to learn numeracy skills. Approach won awards for best business idea. Successful with 100% of students tested at DS achievement centers

### Research Experience

**Cornell Virtual Embodiment Lab** with Professor Andrea Stevenson Won Jan 2021 – Present

- Developed VR hospital environment model in **Unity** and **C#** for helping healthcare workers affected by PTSD

### Leadership and Awards

- **Founder & President**, Learning and Development Matter, an organization to teach numeracy and social skills to children with learning disabilities (June 2018 – June 2020).
- SPICMACAY Cornell Chapter President (June 2019 - Present)
- PowerPitch State Award for innovative business ideas; City of Naperville Youth Service Award