# **Swetha Yegappan**

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**EDUCATION**

**University of Illinois at Urbana-Champaign**  *May 2026 (expected)*

*Bachelor of Science in Computer Science and Economics* **GPA**: 3.97 / 4.00

* Chancellor’s Scholar (top 1.5%) | Dewey B. & Velma P. Stuit Scholarship Recipient | Dean’s List
* Coursework: Data Structures & Algorithms, Linear Algebra with Computational Applications, Software Design Lab, Economic Statistics, Micro/Macroeconomic Theory, Discrete Structures, Intro to CS I & II, Multivariable Calculus

**SKILLS**

**Programming Languages:** C++**,** Python, R, Java, JavaScript, HTML, CSS, SQL

**Tools/Libraries:** Flask, React, TensorFlow, PyTorch, Pandas, NumPy, Scikit-Learn, Git, Docker, Android Studio, AWS

**RELEVANT EXPERIENCE**

**Singleton Law Firm, P.C.** *Jul. 2024 – Sept. 2024*

*Patent Law Intern* Champaign, IL

* Conduct legal research for 3 patent applications, reviewing 10+ sources to compile and analyze similar patents, drafting and writing arguments to prove novelty, utility, and inventiveness and ensure USPTO compliance to streamline acceptance
* Examine and contribute to 30+ technical product diagrams & descriptions, explaining design features of various software, mechanical, and electrical devices, and translating technical terminology into effective legal argumentation and analysis

**University of Illinois, Department of Statistics** *Jun. 2024 – Aug. 2024*

*Data Science Intern* Champaign, IL

* Analyzed CDC data from 80+ counties in the U.S., visualizing patterns in R, correlating heat index, intensity, frequency of extreme temps, and socio-economic factors with mortality and hospitalization rates to establish a causal relationship
* Performed regression analysis & proposed generalized additive model (GAM) to predict future heat-related illness impact rates, segmented by variables such as age group and gender, achieving a model precision with 86.8% explained variability

**OTCR Consulting**  *Jan. 2024 – May 2024*

*Strategy Consultant*   Champaign, IL

* Executed market research for a $13B financial services firm, interviewing 6+ financial advisors and analyzing 7 competitors, to devise solutions in 3 distinct areas: data collection, portfolio construction, and product execution
* Contributed to weekly client calls to ensure progress, ultimately delivering 5 recommendations regarding enhanced API usage, strategic pricing, & user-friendly interface implementation, projecting a 24% increase in customer engagement

**LEADERSHIP & INVOLVEMENT**

**Siebel School of Computing and Data Science**  *Aug. 2024 – Present*

*Student Ambassador & Research Scholar* Champaign, IL

* Conduct 7 hours of research weekly under Prof. Mehta on topics in algorithms, computational economics, & game theory
* Lead 3-4 hours of mentoring and recruitment activities weekly for underrepresented students in computer science

**Phi Chi Theta Professional Business Fraternity** *Sept. 2023 – Present*

*Consulting Group Director | Pledge Coordinator* Champaign, IL

* Acquire 5 new clients, manage trainings for 40+ consultants & project managers, and host weekly consulting workshops
* Serve as liaison between 30 new members & 100+ active members, organizing a day-long retreat to foster group bonding

**Association for Computing Machinery** *Sept. 2023 – Present*

*Economics & Policy Group Member* Champaign, IL

* Engage in trading competitions and technical projects on game theory, market equilibriums, and blockchain concepts
* Organize materials for roundtables on software policy, tech ethics, and intellectual property issues for 50+ students

**ConnectMe Tutoring**  *Jun. 2021 – Aug. 2023*

*STEM Tutor*   Peoria, IL (Remote)

* Held 100+ hours of weekly tutoring sessions & created study plans for K-8 students in computer science & mathematics
* Facilitated the pairing of 200+ new students with tutors in 8 months, driving 70% increase in organizational growth

**PROJECTS**

**Game Theory Simulation** *Aug. 2024 – Present*

* Develop & train a reinforcement agent using Q-learning for the Prisoner's Dilemma game, optimizing decision strategies

**Climate Data Analysis** *Sept. 2023 – Dec. 2023*

* Built heatmap depicting correlations between poverty/race & natural disaster impact by incorporating NRI/population data