Ananya Bhatia

(224) 713-8246 | ananyab@u.northwestern.edu | linkedin.com/in/ananyabhtia/

Education

Northwestern University   Expected Graduation: June 2027
*Combined Master's and Bachelor's Degree in **Computer Science***   *Evanston, Illinois*
*Concentration in **Software Engineering**, Certificate in Integrated Marketing Communications and Minor in Fine Art*
- **Major GPA:** 3.75 / 4.00, **Overall GPA:** 3.59 / 4.00
- **Relevant Coursework**: Data Structures and Algorithms, C/C++, Scalable Software Architectures, Artificial Intelligence, Machine Learning, Human-Computer Interaction, Computation Theory, Agile Software Development, Combinatorics, Discrete Mathematics, Computer Systems, Social Networks Analysis, Ruby on Rails Development
- **Activities:** Women in Computing, Marketing Club VP, Art Studio Supervisor, Mentorship for High School Students

Technical Skills

Programming Languages: Python, SQL, R, C, C++, JavaScript, TypeScript, Ruby, HTML5, CSS (with Bootstrap, Tailwind)
Technologies: React.js, Node.js, Rails, Flask, MySQL, Firebase, AWS (Lambda, EC2, API Gateway, S3, RDS), Docker
Developer Tools: Git, Github, VS Code, Postman, RStudio, Figma, Adobe Creative Cloud, Slack, Notion, Trello

Experience

Snaplet for Northwestern University Department of Computer Science   May 2025 - Present
Founder and Software Engineer   *Evanston, Illinois*
- Secured $4,000 award to develop program visualization software serving 200+ monthly users in intro CS courses
- Engineered full-stack tool with React.js, dnd-kit, and Firestore for real-time data sync and advanced permissions
- Deployed on Firebase Hosting with scalable cloud infrastructure, reducing 180+ faculty grading hours per quarter

PADS Lake County   March 2025 - June 2025
Software Engineer Consultant   *Evanston, Illinois*
- Drove Agile team of 4 engineers consulting for nonprofit, delivering React.js, Tailwind, Firebase reporting platform
- Built public and admin portals with Realtime DB and controlled forms, decreasing report processing time by 40%
- Integrated Google Maps API heat map with reports-on-hover, highlighting hotspots and supporting 500+ reports

TIDAL Lab   November 2024 - March 2025
Software Engineer Intern   *Evanston, Illinois*
- Developed TunePad admin page using React.js and TypeScript, with dynamic components and role-based access
- Redesigned UI/UX in Figma, improving navigation, responsiveness, clarity, and administrator workflow efficiency
- Automated content management with React hooks and real-time updates, lessening administrative time by 50%

Northwestern University Department of Computer Science   September 2024 - Present
Teaching Assistant: Fundamentals of Python Programming   *Evanston, Illinois*
- Mentored 100+ students in Python through office hours and individual support, improving coding proficiency
- Collaborated with faculty to beta-test and refine lab assignments, ensuring clarity and effectiveness of questions
- Graded 200+ assignments, providing personalized feedback on debugging, pseudocode, and time complexity

Projects

Ignite Startup Matchmaking App | React.js, Typescript, Firebase Realtime DB   March 2025 - June 2025
- Led a team of 5 engineers using Agile methodologies to build a student-startup matchmaking app with Firebase
- Utilized React.js, TypeScript, and Tailwind to implement profiles and customizable dashboards for an intuitive UI
- Designed NoSQL schema in Firebase Realtime Database using nested JSON nodes and optimized ID-based queries

Course Marketplace App | Ruby on Rails, JavaScript, Bootstrap, PostgreSQL   March 2025 - June 2025
- Built Ruby on Rails course marketplace with MVC architecture, Google OAuth, and an ML recommendation system
- Developed swiping interface with JavaScript, Bootstrap, PostgreSQL database, and Cucumber automated testing
- Implemented course filters with Faker seeding, Kaminari pagination, PWA functionality, and Heroku deployment

Salad Scheduling | Python, AWS (Lambda, EC2, API Gateway), JavaScript   August 2024 - December 2024
- Designed a Python scheduling algorithm, reducing shift allocation time by 95% from 5-6 hours to 10–15 minutes
- Built a responsive frontend and lean backend with Lambda, EC2, and API Gateway to eliminate server maintenance
- Deployed production-ready AWS app with automated testing and monitoring, serving 10+ NU admin staff weekly