# Lev Rosenberg

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#### **EDUCATION:**

Northwestern University, Weinberg College of Arts and Sciences, Evanston, IL | June 2024

Bachelor of Arts: Majors in Computer Science and Cognitive Science, GPA: 3.90/4.00, cum laude

# **TECHNICAL SKILLS:**

- Programming Languages: JavaScript, TypeScript, Python, C, C++
- Front-end tools: React.js, HTML, CSS, Next.js, Tailwind, D3, Konva
- Back-end tools: Node.js, Express.js, Django, SQL, Google Firebase, AWS RDS, S3, Lambda

#### **RELEVANT EXPERIENCE:**

**SONIC Lab** | Frontend Development Intern | Evanston, IL

Jan 2024 – Present

- Refactored outdated React repository and iteratively implemented 10+ new features based on bi-weekly UX testing.
- Prototyped UI designs in Figma for research platform on human-AI teams, aligning with usability heuristics.
- Integrated OpenAI's API for chat assistant within group chat feature, embedding AI alongside human interaction.

### Engineers for a Sustainable World | Full Stack Developer | Evanston, IL

Sept 2023 – Apr 2023

- Enabled real-time database updates using Cloud Firestore snapshot listeners, syncing with submissions by system & users.
- Built out backend solution for paginated recent activity log, integrating 4 rounds of feedback from software lead.
- Incorporated local backend emulator into development process, reducing average testing time per feature by 30%.

# Maddox AI | Frontend Development Intern | Berlin, Germany

Jun 2023 – Aug 2023

- Led project to overhaul Maddox's image annotation platform, solving existing issues surrounding image rendering, annotation drawing and manipulation, and zoom-pan functionality.
- Developed 3 TypeScript demo platforms demonstrating capabilities of visualization frameworks like D3.js, Konva, and visx.
- Wrote report evaluating frameworks in terms of user and developer experience, performance metrics, and DOM-handling.

### Delta Lab | Undergraduate HCI Researcher | Evanston, IL

Jan 2023 - Jun 2023

- Collaborated with team of 3 developers to optimize new iteration of web-app enabling frontend developers to master advanced CSS techniques, tracking team progress using bi-weekly scrum sprints.
- Conducted weekly tests to iteratively pinpoint user obstacles, resulting in 60% increase in CSS learning by users.
- Aligned the tool with learning science principles, integrating relevant research into design process.

#### **PROJECTS:**

### Carbon Footprint Tracker | React, Tailwind, AWS, MySQL

- Created full-stack web-app using React and Next.js helping users visualize their carbon footprint and environmental impact.
- Implemented serverless architecture with AWS Lambda and API Gateway, using the ClimatIQ API for footprint estimations.

# Angel Shot | React, OpenAI, Amazon Transcribe

- Won 3<sup>rd</sup> place at NU hackathon for app initiating 'calls' with AI to help individuals feel safe in uncomfortable situations.
- Leveraged Amazon Transcribe's speech-to-text and OpenAI's text-to-speech APIs to facilitate real-time conversation.

# **Digital Theremin** | C

- Built embedded software in C for digital theremin instrument.
- Connected ultrasonic distance sensor via GPIO that mapped distances to frequencies played by PWM output and integrated with capacitive touch sensor for play-pause functionality.

# Split Pay | React, Express.js, WebSockets, PostgreSQL, AWS RDS

- Co-developed end-to-end full stack mobile web app to streamline restaurant check bill-splitting.
- Created REST API with Express, integrated PostgreSQL for DBMS, and utilized WebSockets for real-time updates.

# **LEADERSHIP EXPERIENCE:**

ARTica Studios | Ceramic Studio Technician | Evanston, IL

Mar 2023 - Present

- Mentored studio assistant and desk attendants, facilitating skill development and fostering collaborative culture.
- Offered expert guidance on ceramic techniques, materials selection, and project execution to studio members.

# Purple Haze A Capella | Music Director | Evanston, IL

Mar 2021 - Jun 2023

- Directed and trained 20 undergraduate singers to perform at 30+ concerts, paid gigs, and competitions.
- Composed over 15 original arrangements tailored for both live performances and studio recordings.