Tommy Bruzzese

EDUCATION

Stanford University

M.S. Computer Science '24, concentration in Artificial Intelligence; GPA: 4.085/4.00

- Course Assistant for Conversational Virtual Assistants w/ Deep Learning, a 100-person graduate-level course
- <u>Taught lecture</u> on Ethics, alignment, and AI-humanities; mentored 7 project groups on social-good LLMs
 Upcoming Courses: Graphics in the Era of AI, Computer Graphics: Rendering, Geometry, and Image, Deep
 - Learning for Computer Vision, Visual Computing Systems, 3D Reconstruction to Recognition

B.S. Symbolic Systems '23, concentration in Human-Centered Artificial Intelligence; GPA: 4.086/4.00

- University Distinction; inducted into Phi Beta Kappa interdisciplinary honors society as a Junior (2% of class)
- Art History minor Explored paintings with X-rays, SEM microscopes, and computer vision; as well as through scholarly lenses of power, market forces, and aesthetic
- Paris Study Abroad Winter '23 Took studio painting at French partner school; studied historic cultural and scholarly sites for African-American expats in Paris Noir course

EXPERIENCE

Stanford Open Virtual Assistant Lab (OVAL), Research Engineer

- Working with CS Professor Monica Lam and Medical Professor Lynn Koegel on app for individuals with autism to develop friendships and job skills by practicing social conversations, with supportive LLM-based feedback.
- Helping develop React app and GPT prompts, manage IRB study, and conduct ethics review for grant funding.

Stanford Brains in Silicon Lab, Research Engineer

- Working in Professor Kwabena Boahen's lab to improve neural simulation and physical modeling of natural sciences in high dimensions. Researching how AI models can leverage control in dynamical systems identification.
- Co-built open-source Python tool to benchmark how models scale in their sample efficiency and generalization.
- Developed 13 dynamical systems, and in NeurIPS '23 paper, designed 6 graphics to accessibly explain key results.

Stanford Human-Computer Interaction (HCI) Group, Research Engineer

- Working with Professor James Landay to bridge the physical and digital divide. Helped interview participants, run Grounded Theory analysis, and write paper discussing complex frustrations of 404 people who track emotions.
- Co-developed slow-tech React app for follow-up paper. Built user-driven reflective experience and enabled longterm trends analysis with digital affordances and computer vision. Conducted month-long IRB study (N=36).

Stanford FashionX, Vice President (2.5 years), Executive Director (current, 1 year) Apr 2020 – Present

- Grew club to be leading creative hub for 250+ students. Co-host quarterly Flea Market where hundreds swap free clothes and support student brands. Advised design for Stanford's first student-led runway at Cantor museum.
- Co-lead (2x) of AR/3D fashion cohort. Mentor 10-12 first-time designers for the year on creating imaginative, zero-waste digital clothes and showcasing them in iconic campus venues. Manage three corporate partnerships.
- Editor-in-Chief of published *Fashionable Data* book on data-backed runway trends. Directed 9 students in conducting Python analysis and creating engaging data viz on Coach, Prada, and French influencer fashion.

Apple, Hardware Technology Intern (Silicon Engineering Group)

- Full-stack developer of React/Rails portal that streamlined asset management for hundreds of hardware engineers
- Created extensible UI and helped develop accessibility tests for colorblindness and screenreaders in launch flow

Tesla, Product Management Intern (Supercharging User Experience)

- Pitched and executed weekly on 9 Vehicle UI proposals for CTO and Charging Director. Led design of globallylaunched feature of how users first onboard to charging, making it accessible and enjoyable. Co-tested vehicle UI.
- Principal product manager of 4 engineers for internal feature of where to install new chargers. Led weekly sprints for 3 months, communicated succinctly to stakeholders, and launched with 2700 employee sessions in first week.

Jun 2022 – Present

Apr 2020 - Present

Nov 2023 - Present

Jun 2021 – Sep 2021

Jan 2021 – Jun 2021

Expo, Software Engineering Intern

An open-source platform for creating universal apps in React Native. Used in over 750k GitHub repositories.

• In 6 weeks, developed new Activity dashboard. Built responsive React UI (designed with Figma) that dynamically renders each Activity type; built GraphQL API and coalesced multiple databases with custom pagination.

OTHER AWARDS and PRESS

- [1] SHOWstudio, "Is Digital Design the Future of Fashion School?" (May 2023)
- [2] FashionUnited, "Stanford teams up with Zero10 and Browzwear bringing digital design to students" (May 2023)
- [3] Best Website Award, CS 147: Introduction to Human-Computer Interaction, Project Group (Smile@Work) (Dec 2019)

VOLUNTEERING

Cape Abilities (Non-profit farm in Dennis, MA), Volunteer Hydroponic Farmer Aug – Sep 2019, Aug 2023

- Mentored and job-coached adults with disabilities in designing greenhouses and in weekly prep of CSA boxes
- Discussed sustainability with customers; farmed vine tomatoes, hydroponic lettuce, and vertical cucumbers

SKILLS and INTERESTS

Languages: JavaScript, Python, React, Java, React Native, C++, Swift, C, GraphQL, Ruby on Rails, PostgreSQL Skills: Professional Working French, open-source engineering, accessible UX design, research paper writing Interests: Whole-grain Italian cooking, secondhand markets, vintage jeans, communal matcha, soccer, 5k training