

Ludovico Federici

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EDUCATION

University of California, Berkeley | Berkeley, CA Exp. Dec 2024
B.A. Computer Science, B.A. Cognitive Science, Minor in Data Science (3.97 GPA)

- **Relevant Coursework:** Operating Systems, Efficient Algorithms, Discrete Mathematics & Probability, Advanced Data Science, Database Systems, Computer Architecture and Engineering, Data Structures, AI for Healthcare
- **Awards and Recognitions:** Nova 111 Italy Student List, Sutardja Center Certificate in Entrepreneurship & Technology, Cal Alumni Association Leadership Scholar (2023/2024), Dean's List (5/5 semesters), Honors To Date

Sevenoaks School | Sevenoaks, United Kingdom Aug. 2019 – May 2021
IB Diploma: HL Mathematics (Analysis), Physics, Economics (45/45, 1570 SAT)

TECHNICAL SKILLS

Programming Languages: Python, Java, C, SQL, JavaScript, HTML, CSS, RISC-V, Dart, Scheme, MQL, LaTeX.
Libraries & Tools: Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Pytorch, OpenCV, Git, OpenMPI, OpenMP, SIMD.

WORK EXPERIENCE

NVIDIA | Berkeley, CA Jan. 2023 – May 2023
Project Manager Contract (NextGen Consulting)

- Led team of 5 to assist NVIDIA's integration of large language models & ML to solve inefficiencies of clinical trials.
- Interviewed 30+ industry experts to identify 4 areas of growth & B2B GTM strategies in \$1.7B SAM for NeMo LLM.

Neurotech@Berkeley | Berkeley, CA Jan. 2023 – May 2023
Software Developer for Neurode

- Partnered with Australian Startup in the creation of a drug-free solution to ADHD focused on brain stimulation.
- Developed 5 games with Flutter to test focus & eye-tracking algorithm with OpenCV to monitor gaze (1° accuracy).

R&D Software Engineer Aug. 2022 – Dec. 2022

- Built a BCI using AI symbiosis to enable user communication through vision - for NTX Student Club Competition.
- Worked on a Python flask backend and a reactive JS framework frontend to analyze SSVEPs in collected EEG data.

Cruuz | Berkeley, CA May 2022 – Aug. 2022
Software Engineering Intern

- Integrated platform into Google Reserve to supply merchant and availability feeds for processing and booking.
- Co-led development, staging, and production of UI/UX website re-design to increase session length by 30%.

PROJECTS

CNN Model to Assess Severity of Breast Cancer from Biopsy Images | *Python, scikit-learn, Seaborn*

- Built 10-epoch model (87% testing accuracy) to predict future likelihood of breast cancer from Nightingale Dataset.

NGram Explorer | *Java, HTML, CSS*

- Constructed browser-based tool using Time Series and TreeMaps to explore word usage in 200 years of literature.

Parallelized Convolutions | *C, OpenMPI, OpenMP, SIMD*

- Wrote program to handle 2D convolutions and parallelized at data, thread, and process level leading to 10x speedups.

Central Processing Unit (CPU) | *Logisim*

- Designed 2-stage pipelined functional CPU capable of running RISC-V instructions.

LEADERSHIP EXPERIENCE

NextGen Consulting | Berkeley, CA May 2023 – Dec 2023
Vice President of Client Relations

- Led marketing outreach to 100+ potential clients to identify 5 projects - Intel 2x, Electronic Arts, Palantir, Discover.
- Onboarded 10 Project Managers and overlooked the development of all projects, increasing NGC's earnings by 400%.

OTHER

Languages: English (native), Italian (native), Spanish (fluent), French (fluent), Arabic (Beginner).
Interests: Fitness (Weights & Climbing), Traveling to Asia, Reading Mindset Books, Volunteering in DR, Watching Inter.