

SASHA LAMOT

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EDUCATION

UC BERKELEY- Computer Science BA - GPA: 3.6

Graduation May 2025

Coursework includes: CS 170 - Efficient Algorithms, CS188 - AI, CogSci131 - Neural Networks, CS186 - Database, CS161 - Computer Security, CS70 - Discrete Mathematics and Probability Theory, CS 61C - Computer Architecture, CS 61B - Data Structures, CS 61A - Computer Programs, Data 100 - Data Science, EECS 16A - Designing Information Devices and Systems, UGBA88 - Data and Decisions in Business, Math - Calculus & Linear Algebra

International School of Brussels - International Baccalaureate (IB) Bilingual Diploma (Points 44/45) **Belgium June 2021**

SKILLS

Skills: Python, Java, Ruby, C/C++, SQL, x86, HTML/CSS, Scheme, RISC-V | Pytorch, Kubernetes, Docker, API Development, AWS, Databases (PostgreSQL, Clickhouse, MySQL, Redshift), Pandas & Numpy, Git, Linux | Algorithms Theory, Complexity Analysis, Research, Frontend, Backend, Fullstack, UI/UX Design, Applied Math, Electrical Engineering, Computer Architecture, Regex | Leadership, Public Speaking, Photography

Languages: English, French, Dutch (Intermediate), Hindi (Beginner)

PROFESSIONAL EXPERIENCE

Apptweak (ASO Tool of the Year 2021) - App Store Optimization (ASO)

Jun - Aug 2024 Brussels, Belgium

Software Engineer Intern

- Leading ASO software for app companies (King, Paypal, Booking.com, etc.) tracking **installs, keywords, ads**, etc.
- Working in team of 6 on **faster data retrieval (25x more efficient)** on **~25 million rows of data per day** via database migration from **Redshift** to **Clickhouse** and optimizing database structure and insertion mechanism

UC Berkeley Engineering Dept - Jadoo Technologies

Fall 2023 - Current Berkeley, California

Research Apprentice & Software Engineer to Dr. Waqas Khalid

- Leading a team of 12 to create software to perform cutting edge **nanotech** research performing **e-beam lithography**
- Building a **frontend interface** to simulate the lithography in different scenarios while **optimizing an algorithm** to increase the efficiency of the lithography using multiple electron beams at once

IMEC (world-leading R&D and innovation hub in nanoelectronics and digital technologies)

Jun - Aug 2023 Gent, Belgium

Software Engineer Intern

- Worked collaboratively with researchers to **optimize data processing pipeline** for artificial nanopore experiments
- Designed pipeline to facilitate the trajectory from **raw data to analysis** to usable data for scientist, using **Microsoft Azure**
- Focused on creating and implementing, in python, **noise detection algorithms** such as **CUSUM, mean drift, KDE plots**, to be used on large data sets (**~5 million data points**) collected from the experiments

Plan-it App

2018-2020 Brussels, Belgium

Co-Founder & Chief Technology Officer

- Co-founded a personalized **ed-tech** study-plan app to optimize a student's work & study time for the IB
- Designed the **front-end** layout of the app using **HTML and CSS**, as well as **back-end** using **PHP and SQL** which included a secure **login and sign-up** page, sending and retrieval of data in **MySQL** database using **phpMyAdmin** as a hosting service
- Created business model including plans for scalability, recruited a team of 4, contacted **IBO representatives**

PROJECTS

Machine Learning & Reinforcement Learning - Neural Networks

2024 Berkeley, California

- Designed and built NN with **Pytorch** for; number recognition, language translation, function approx. and game simulation
- Used methods such as **Deep Q-learning, Perceptrons, Value Iterations, Epsilon Greedy**

Gitlet

2022 Berkeley, California

- Built terminal version control system similar to **github** with features such as **add, commit, log, merge, status, branch**, in Java

Attax

2022 Berkeley, California

- Strategy board game where player can play against **AI** created by using **Alpha-beta pruning** on a **game tree**

Remote Data Collection Module

2020-2021 Goa, India

- Designed, coded, and built remote soil data (Air and Soil Temp. & Humidity, Sunlight) collection system data with Arduinos
- Built radio wave communication and made **data streaming algorithm** to parse data and stored it in **MySQL database**
- Made **GUI in Java** allowing graphing and displaying of data, **save and import**, communication with database

ARTS & SPORTS & VOLUNTEER

- Musician** - (play the guitar, piano and trumpet), band leader, music composer
- Actor** - Acted in four plays/musicals + 1 short film during 2 academic years at school
- Cross-country runner / Tennis / Rock Climbing Club Berkeley** - represented my school in cross-country
- Student Leadership Team** - 12th Grade Class Representative