SASHA LAMOT

+1 (341)766-8730 · sashalamot@berkeley.edu · https://github.com/sashalmt

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: Pytorch, Kubernetes, Docker, API Development, AWS, Databases (PostgreSQL, Clickhouse, MySQL, Redshift), Ruby, Java, Python, C/C++, Javascript, SQL, UI/UX Design, HTML, CSS, Scheme, RISC-V, x86, Applied Math, Pandas & Numpy, Git, Algorithms Theory, Complexity Analysis, Research, Frontend, Backend, Fullstack, 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 optimizes 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