

Noel Sason

✉ noel_sason@berkeley.edu 📍 Berkeley, CA 🌐 github.com/noelsason

EDUCATION

University of California, Berkeley — *B.A. Molecular Biology | B.S. Data Science*

Aug 2024 – May 2028

GPA: 3.82 / 4.00 | **Relevant Coursework:** CS61B (Data Structures & Algorithms), Data C88C (Computational Structures in Data Science)

EXPERIENCE

Research Affiliate — *Lawrence Berkeley National Laboratory*

Jan 2026 – Present

- Built a DuckDB-backed analysis pipeline over the KG-Microbe knowledge graph, enabling fast SQL-based traversal across taxa, chemicals (CHEBI), environments (ENVO), anatomical sites (UBERON), and phenotypic traits for 80+ disease-microbiome studies.
- Wrote study-generation scripts that transform BugSigDB differential-abundance exports into per-study directories of increased/decreased taxa lists keyed to NCBI Taxon IDs, covering colorectal cancer, lung cancer, epilepsy, and skin wound cohorts.
- Designed a YAML-driven trait-profile generator that parses analysis results across all study directories and emits wide and long TSV tables (study × phenotype) for downstream statistical analysis and cross-cohort meta-analysis.
- Standardized reproducible workflows with Justfile task runners, uv-managed Python environments, and authored technical documentation; shipped via PR-based collaboration on GitHub with multiple merged contributions.

Finance Director — *Various Roles within the ASUC*

Sept 2024 – Present

- Serve as Finance Director for the South Asian Ad Hoc Committee and the South Indian Society at UC Berkeley, managing combined budgets and end-to-end fund allocation across both organizations.
- Administer approximately \$200,000 in funding through CASSA, evaluating and awarding grants to student-led proposals across campus while ensuring compliance with ASUC financial governance.
- Redesigned financial tracking and reimbursement systems with automated audit trails, reducing processing latency and enabling data-driven spending forecasts for upcoming fiscal cycles.

PROJECTS

Canvascope & Lectra — canvascope.org

Founder / CEO / Lead Developer

- Founded a privacy-first academic productivity platform spanning a Chrome extension (Manifest V3) and a native iOS companion app, scaling to 10+ university Canvas domains with local-first indexing and sub-100ms semantic search.
- Architected intent-aware search that surfaces distributed course materials (assignments, files, pages) from a single query, backed by LLM embeddings and automated document categorization across multi-course environments.
- Developed Lectra, a native iOS/iPad app with Apple Pencil annotation and a custom DropBridge file-transfer protocol; built Supabase backend for real-time cross-device sync of annotated PDFs and course data.
- Led end-to-end product lifecycle—roadmap planning, compliance, Chrome Web Store deployment, Vercel hosting, and go-to-market positioning—designing the architecture for future mobile and ecosystem integrations.

RxBrief — rxbrief.org

Next.js, Javascript, Supabase

- Built a full-stack health platform featuring a live FDA drug label lookup API and real-time Supabase chat for patient-provider communication simulations.
- Developed a multi-source healthcare jobs aggregator leveraging Greenhouse, Lever, and RSS APIs; implemented server-side filtering for rapid, domain-specific search results.
- Worked with industry professionals to design and program a website tailored to what healthcare professionals need.

Engineering Automation Pipeline

GitHub Actions, Apps Script, Python

- Built a GitHub-based bug intake and triage automation system integrating Google Forms, Sheets, and Apps Script to auto-generate structured issues with priority labels (P1–P3) and project board tracking.
- Designed CI/CD-style workflows with GitHub Actions for automated polling, JSON export to repo, and structured issue labeling; maintained lifecycle columns (New, Ready, In Progress, Blocked, Done) for engineering operations.

SIS Community App — *South Indian Society, UC Berkeley*

Swift, SwiftUI, Supabase

- Developing a native iOS app for a 200+ member student organization, featuring event management with Stripe payment integration, a shared photo album system backed by Cloudflare R2, and real-time messaging for member engagement.
- Architected a Supabase backend with role-based access control for leadership vs. general members, enabling committee-scoped file archives, push notifications, and centralized org operations replacing fragmented tools.

TECHNICAL SKILLS & CERTIFICATIONS

Languages & Tools: Python, Java, SQL, JavaScript, HTML/CSS, Git, Swift/SwiftUI, Docker, Linux, Raspberry Pi

Data & Platforms: DuckDB, Pandas, NumPy, Supabase, Stripe, Cloudflare R2, Semantic Search, GitHub Actions, Vercel

Certifications: American Heart Association BLS (Basic Life Support)