

# SHELDEN SHI

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## EDUCATION

**University of California, Berkeley**

**Aug 2019 – May 2023**

B.A., Computer Science & B.A., Cognitive Science

GPA: 3.7/4.0

### Relevant Courses:

- Structure & Interpretation of Computer Programs (**4 Python projects**), Data Structures (**4 Java projects**), Machine Structures (**2 C projects, RISC-V**), Discrete Math and Probability, Designing Information Devices and Systems, Foundations of Data Science (**4 Data Science projects, Python**), Efficient Algorithms and Intractable Problems (**Algorithms**), Principles & Techniques of Data Science (**Data Science, Python**), Probability and Random Processes
- Machine Learning (Stanford University), AI for Medicine, TensorFlow for Artificial Intelligence (DeepLearning.AI)

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## EXPERIENCE

**Roche Diagnostic, Automation Engineer Intern**

Santa Clara, CA | **May 2021 – Present**

- Implemented standalone automation tools and data pipelines
- Used Python, Pandas and Tkinter library
- Increased consultants' workflow efficiency by 500%

**Berkeley Pharma Tech, Software Engineer Intern**

Berkeley, CA | **Jan 2021 – May 2021**

- Implemented and deployed an ERC-20 token (digital currency) on Ethereum Network
- Built a full-stack web app to allow users to interact with the token
- Utilized React.js for the frontend, Node.js for the backend, and Solidity for the smart contract

**UC Berkeley, Research Assistant**

Berkeley, CA | **Aug 2020 – Present**

- Designed and implemented data pipelines, and ML models to predict emotions using audio data from police body cams
- Developed CNN models in PyTorch and used Microsoft Azure for training and storage
- Achieved 87% cross-validation accuracy

**Institute for Security and Technology (IST), Software Engineer Intern**

San Francisco, CA | **May 2020 – Nov 2020**

- Trained NLP translation models for 3 languages and built a standalone APP for document processing and translating
- Used Google AutoML to fine tune Google's NMT models and Java for the standalone application
- Boosted translation accuracy on unseen data by 15-27% and document processing speed by 400%

**Daily Chinese LLC, Founder**

Shanghai, China / Detroit, MI | **Summer 2018 - Spring 2019**

- Directed a team of 6 including 2 Mandarin professors from *Shanghai University* to develop a Chinese learning App.
- Sold the app to *Shanghai Yunxuan Information Technology Ltd.*, and is now [the best reviewed Chinese learning app](#) on Apple App Store

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## HIGHLIGHTED PROJECTS

**EEG Device Calibration Tool**, Consulting Team Project

**Feb 2021 – May 2021**

- Built a calibration tool for Neurable's EEG headsets using JavaScript (React) and backend in Python

**Medical Resources Search Helper Browser Extension**, Team Project, [GitHub](#)

**Jan 2021 – Apr 2021**

- Led a team of 3 to build a web-app using React frontend and Flask backend to help doctors and patients diagnose

**Biomedical Literature Visualizer**, Team Project, [GitHub](#)

**Aug 2020 - Oct 2020**

- Led a team of 4 to build an open-source tool that helps to analyze large sets (200,000+) of research papers using Python
- Enabled researchers/ doctors/ patients to visualize and discover potential relationships between papers and entities by applying NLP and Graphic algorithms

**Numc**, 1-Person Project

**Nov 2020 - Dec 2020**

- Implemented a Python-C API that speeds up matrix mul by 150X and matrix power by 2500X by utilizing parallelism

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## LEADERSHIP

**Ideas on Consciousness (Student Club), President /Instructor**

**Aug 2020 - Present**

- Designed and instructed a student-taught class at Berkeley on artificial intelligence and consciousness

**UC Berkeley CS Tutor**

**Jan 2020 – May 2020**

- Provided in-person instruction to 10 CS61A students with class materials and achieved grade improvement in 100% of students tutored over a five-month period

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## SOFTWARE SKILLS

**Programming Language:** Python3, JavaScript, Java, Solidity, C, SQL, HTML, CSS

**Other:** Git, Linux, React.js, Pandas, Machine Learning, Flask, RESTful API, TensorFlow, Cloud Computing (Azure, Google Cloud)