Roxane Martin

✉ roxanemartin@ucla.edu · ☎ (858) 232-2922 · 🔗 roxane-martin · 🐙 martinr9315

EDUCATION

University of California, Los Angeles (UCLA) *September 2019 – June 2023*
Bachelor of Arts in Computer Science & Linguistics, Minor in Mathematics
- **GPA:** 3.887/4.0
- **Honors:** Cum Laude, Departmental Honors
- **Relevant Coursework:** Machine Learning, Algorithms & Complexity, Artificial Intelligence, Applied Numerical Methods, Linear Algebra & Applications, Optimization, Computational Linguistics I & II

EXPERIENCE

UCLA Computational Linguistics Los Angeles, California
Student Researcher & Honors Thesis Candidate *March 2021 – June 2023*
- Worked with Professor Tim Hunter on computational modeling of language acquisition
- Developed an EM algorithm for learning probabilistic grammars, focusing on finite-state tree automata

Salesforce Cambridge, Massachusetts
Software Engineering Intern *June 2022 – September 2022*
- Worked on Commerce Cloud Einstein Recommendations team
- Built an activity history lookup to query AWS S3 via Amazon Athena, using JavaScript & SQL
- Created a Kubernetes health checker linked to Slack, using Go
- Designed experiments to measure client-side latency on production machine learning recommendation engines

Salesforce (Mulesoft) Remote
System Engineering Intern *June 2021 – September 2021*
- Built a federated login system, using Terraform, Go, and Python
- Connected MuleSoft's identity provider to AWS's IAM

Edeltech Sion, Switzerland
Software Engineering Intern *September 2020 – December 2020*
- Integrated a machine learning model for aesthetic scoring into an image ingestion system
- Developed a photo selection heuristic to train model for photo curation
- Contributed to a performance dashboard using Django and Tailwind

Experian Remote
Software Development Intern *July 2020 – August 2020*
- Built a database and reporting layer for client transaction analytics using AWS services
- Designed and prototyped database architecture

San Diego Supercomputer Center, UCSD San Diego, California
Machine Learning Intern *June 2018 - August 2018*
- Implemented a ticket classification model trained using supervised machine learning in Python
- Achieved over 85% classification accuracy

PROJECTS

Learning Long-Distance Dependencies via Probabilistic Finite-State Tree Automata
- Explored the use of Probabilistic Finite-State Tree Automata (PFSTAs) in modeling long-distance dependencies in natural language syntax, using Haskell and Python
- Conducted analysis on CHILDES corpus and generated treebanks
- Presented at UCLA Undergraduate Research Week

Image Caption Generator
- Developed image caption generation model comparing accuracy of combinations of pre-trained CNNs and RNNs
- Achieved a cosine similarity score of 0.7812 and 0.0479 BLEU accuracy on Flickr8k dataset

SKILLS

Spoken Languages: Fluent in English and French
Technologies: AWS, Python, Terraform, Git, Kubernetes, Docker, Django, SQL, JavaScript, Go