3201 S. Hoover St #2108
Los Angeles, CA 90089

ADINA KRUIJSSEN

(708) 834-8483
adinakruijssen@gmail.com
https://www.github.com/aekruijssen
https://www.linkedin.com/in/adinakruijssen/

TECHNICAL SKILLS

Languages: C++, Java, Python, Javascript, HTML, CSS, SQL, R
Technologies: Git, Arduino, MySQL, Visual Studio, Eclipse, Apache Tomcat, ML Tools (NumPy, Keras, Pandas, TensorFlow, OpenCV)

EDUCATION

University of Southern California Viterbi School of Engineering
B.S. in Computer Science ***December 2020***

- Presidential Scholar, Trojan Scholar Society, Dean's List Fall '18

Coursework: Data Structures, Object-Oriented Design, Information Security, Discrete Math, Calculus III, Linear Algebra, Software Development, Embedded Systems, Algorithms, Theory of Computing, Artificial Intelligence, Game Programming in C++

EXPERIENCE

- **Course Producer, USC Viterbi School of Engineering** ***January 2019 – May 2019***
  - CSCI 201L: co-write programming assignments, test cases, & grading criteria. I also hold office hours & manage project teams
- **Teaching Assistant, Girls Who Code** ***June 2018 – August 2018***
  - Taught 20 high school girls Scratch, Arduino, Python, Javascript, HTML, and CSS
- **Research Assistant, USC Center for AI in Society** ***October 2017 – March 2018***
  - Mentored by a PhD Student, working with graph algorithms using Gurobi in Python
- **Research Intern/Howard Hughes High School Scholar, University of Miami and HHMI** ***June 2016 – August 2016***
  - Conducted research under the guidance of a professor in the Department of Physics
  - Wrote & presented scientific research paper: "The Effect of Light Intensity on Color Preference in Drosophila *melanogaster*"
  - Designed and carried out tests on fruit flies related to vision and color perception, and used R in RStudio to analyze data
- **Summer Immersion Program, Girls Who Code** ***June 2015 – August 2015***
  - Completed projects using Python, Javascript, HTML, and CSS
  - Created web app Books & Crannies: Recommends books (using Google Books API) based on preferences
  - User functionality, with wish lists and book history saved to accounts and saved on cloud database Parse

INVOLVEMENT

- **CAIS++** Center for AI in Society's Student Branch, completed semester-long workshops and projects
- **Scope** "Build and learn cool things with great people – host retreats, industry speakers, hackathons, and more to encourage a culture of creation, hacking, and fun at USC" Curriculum includes: Node.js, React JS, Swift, Electron
- **USC's Association for Computing Machinery** ACM^2 Leadership Development Program, Big/Little Program (2017)
- **Robotics Team** Built BattleBots and competed in regional, national, international tournaments (2014-2017)
- **Girl Scouts** Silver Award, George B. Hartzog Youth Group award (2005-2017)

PROJECTS

- **USC Self Driving Car Competition Team – Lead Programmer/Software Developer**
  - RC car with Raspberry Pi microprocessor that uses image processing & ML to detect track, adjust steering angle/motor speed
- **Sycamore Scheduler**
  - Course planning web app for Software Development semester team project. Course data from USC site collected with Python web scraper, stored in SQL database along with user account data (saved major, class history, friends they follow)
  - I implemented web sockets and multi-threading to enable real-time collaborative editing (similar to Google Docs)
- **Machine Learning Projects**
  - Classifying dogs vs cats in photos, implemented with Convolutional Neural Network trained from Kaggle dataset
  - Identifying Obama vs Trump tweets, implemented with Recurrent Neural Network/LSTM & trained GloVe word embeddings
  - Interpreting handwritten digits, implemented with Generative Adversarial Network
  - Reinforcement Learning to train agents to self-balance Cartpole (Q-Learning) and play Atari games like Pong (OpenAIGym)
  - Facial/object detection, recognition, and classification in photos and videos with OpenCV