Joey Hejna

Berkeley / Palo Alto CA | 650-404-7775 | jhejna@berkeley.edu | github.com/jhejna | linkedin.com/in/joeyhejna

Education

UNIVERSITY OF CALIFORNIA, BERKELEY | 4.0 GPA   **2017-PRESENT**

Major: B.S. in Electrical Engineering and Computer Science
· Coursework: Linear Algebra, Designing Information Devices and Systems I & II, Data Structures & Algorithms, Discrete Math/Probability Linear Algebra, Physics electromagnetism.

STANFORD UNIVERSITY | 4.0 GPA   **SUMMER 2016**

· Coursework: Client-side Internet Technologies, Differential Equations for Engineers

Professional Experience & Research

RESEARCH APPRENTICE | ROMPS GROUP | BERKELEY   **SPRING 2018-PRESENT**

· Designing a 100m oscillating atmospheric probe to measure temp, pressure, humidity data for adv. cloud modeling.
· Utilizing raspberry pi integrated system for collecting/storing custom sensor package data into database.
· Creating mechanically oscillating winch system, synchronized with payload sensors to accurately account for altitude.

RESEARCH ASSISTANT | STANFORD UNIVERSITY   **SUMMER 2016**

· Utilized Python's Natural Language Toolkit to parse and clean 1.3 Terabytes of Corporate 10K and 10Q filings.
· Formed bigram datasets uses to predict corporate donation tendencies based on language usage
· Created a web-based visualizer using JavaScript, SQL, and Google Charts API to allow researchers to view changes in word usage frequency over time, filtered by industry or location using schema similar to that of Google n-grams.
· Worked as sole programmer in team of grad / undergrad. Learned new technologies (web, NLP) independently.

HEAD SAILING INSTRUCTOR | SHORELINE LAKE   **2015-2017**

· Directed staff of twelve employees to run effective youth summer camps and adult workshops for tech firms.

Personal Experience, Activities, & Volunteer Work

ANDORID DEV | PROJECT MANAGER | MOBILE DEVELOPERS OF BERKELEY   **FALL 2017-PRESENT**

· Developed Streamline – a social mobile application for sharing music using the Spotify API. Designed layout for app screens and interfaced with API for token authentication and streaming. Implemented Firebase database schema for data / post storage for each user. The App is downloadable on the google play store.
· Project Management – leading teams of other developers through professional software practices (agile) and ideation.
· Contract team – developing professional Android messaging application for a local startup called Switchboard.

LAUNCHPAD AT BERKELEY | MACHINE LEARNING / AI   **SPRING 2018-PRESENT**

· Member of student AI/ML team designing methods for unique object tracking in video using TensorFlow. We aim to move beyond pure classification of type and track the uniqueness of objects (of the same type) with motion prediction.
· (Indep.) Used OpenCV, python 3 to implement facial recognition and tracking in video with Haar Cascade filters.
· (Indep.) Trained emotion recognition neural net using the Yale Faces dataset to categorize facial expression in video.

CAPTAIN | FIRST ROBOTICS TEAM 114   **2015-2017**

· Lead team of over thirty students through the build process of two full sized $10k competition robots.
· Designed more than two-hundred solid-works components and fabricated on mill, lathe, and 3D printers
· Built advanced pneumatic, flywheel, and drive systems (one involving independent rotation and power delivery).
· Spearheaded championship robot designs, winning 1st place at the 2017 Ventura Robotics competition and competing at the 2017 First Robotics Championship and 2016 Quarterfinals at Silicon Valley Robotics comp.

CAPTAIN, VICE PRESIDENT | MVLA SPEECH AND DEBATE   **2015-2017**

· Competed nationally, ranking 42nd in CA, one of two-hundred to compete at 2016 UK Tournament of Champions, 1st speaker awards at UOP and La Costa Invitational tournaments of over a hundred and fifty competitors.
· Head of middle school outreach, taught and designed curriculum for debate classes across two school districts.

WEB DEVELOPMENT   **2015-PRESENT**

· Created modern personal / portfolio website **joeyhejna.com** utilizing Bootstrap, jQuery, SCSS technologies.
· Web Manager for Beyond Fistula - Created and maintained WordPress website for non-profit providing aid to women in Kenya post fistula surgery from 2015 to 2016

Skills & Distinctions

PROGRAMMING: Java, Python, JavaScript, HTML/CSS, Android, TensorFlow, SQL, Firebase, Language Processing, Unix, R

ENGINEERING: SolidWorks CAD, mill lathe 3D printer & laser fabrication, MATLAB, diff eq, multivar calc, stats, physics

ACADEMIC: UC Berkeley Regents and Chancellors Scholarship Distinction, 2017 Rambus Innovator of the Future Scholarship, UC Berkeley Engineering Dean's List – top 10% of engineering undergraduates