Eric Stein

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Technical Skills and Certifications

- ***Full Stack Software Development*** – React Native, JavaScript, TypeScript, HTML, CSS, Flutter, Dart, Java, Python, Swift, Lua, C, C++, node.js, Flask, Express, FastAPI, Firebase, Heroku, Amazon Web Services, React.js, Google Cloud Platform, MySQL, NoSQL, MongoDB, Git, REST APIs, Websockets, AT&T Assembly, UNIX Shell Scripting, Solidity, Docker
- ***Data Science*** – TensorFlow, R, Jupyter, Python, Matlab, Microsoft Excel, Anaconda
- ***Game Development*** – Unity (C#), Roblox Studio
- ***Miscellaneous*** – Autodesk AutoCAD (certified user), Autodesk Revit (certified user), Adobe Photoshop, Adobe Premiere, Final Cut Pro X

Education and Leadership

University of Virginia | School of Engineering and Applied Science, Charlottesville, VA
Aug 2019 – May 2022

- ***Major*** – Computer Science (B.S.)
- ***Minor*** – Data Science
- ***Current Cumulative GPA*** – 3.882 (Dean's List) (Major GPA: 3.91)
- ***Relevant Coursework*** – Data Structures and Algorithms, Computer Organization and Architecture, Software Development Essentials, Theory of Computation, Operating Systems, Machine Learning, Cybersecurity
- ***Extracurriculars*** – Founder & Former Lead of UVa's Google Developer Student Club (recruited **200+ students**, hosted Google tech events, mentored Solution Challenge teams), International Collegiate Programming Contest (ICPC) Club, Enactus Consulting (assisting Lytos Technologies), Trigon Engineering Society (served as secretary)

Staten Island Technical High School, Staten Island, NY
Sep 2015 – June 2019

- ***Final GPA*** – 4.0 (Advanced Regents Diploma)
- ***Extracurriculars*** – Science and Engineering Research Program, Hackathon, Robotics Team, President of Entrepreneurship in Gaming Club, Swim Team, Math Team

Work Experience

- ***Software Development Engineer Intern***
  - Amazon — *May 2021 – Aug 2021*
    - Team: Alexa Natural Language Understanding Data Preparation (Received Return Offer)
    - Enhanced data prep tools used by **hundreds of internal ML engineers**, improving productivity and expediting the debugging process in data transformation tasks involving critical data
    - **Front-End: Python, UNIX Shell Scripting**
    - **Back-End: AWS**
- ***CTO / Co-Founder / Full Stack Engineer***
  - Pareto Touch — *July 2020 – Present*
    - Engineered a population health management system comprised of:
      1. a cross-platform mobile app (iOS and Android), which provides check-in, appointment-booking, and geofencing functionality
      2. an administrator web app, which allows for geofences to be set up, notifications to be configured, and check-ins to be effortlessly viewed and managed
      3. a HIPAA-compliant backend system, which stores data, sends notifications, runs geofencing logic, consumes hospital data feeds, and facilitates remote patient monitoring
    - Currently being piloted with more than **700 patients and 5 medical professionals** at a practice in Jacksonville
    - Currently in UNF CEI's second Health and Medical cohort; won **first-place ($1000)** at UNF CEI's Demo Day competition
    - **Front-End: React Native, React, JavaScript, Java**
    - **Back-End: Python, Node.js, Firebase, GCP**
- ***Undergraduate Research Assistant***
  - UVa Landmark Recognition — *Nov 2019 – June 2020*
    - Goal: train and deploy a computer vision model that recognizes various UVa landmarks, such as the Rotunda, via crowdsourcing – now open-source on GitHub
    - Contributed by developing and publishing a cross-platform iOS & Android mobile app with two modes:
      1. collect and label images for use in training
      2. display our pre-trained model's predictions about a given photograph
    - **Front-End: React Native, JavaScript**
    - **Back-End: Firebase**
  - TuneScope — *Sep 2019 – Present*
    - Led the development of an online learning environment with three main purposes:
      1. allow users to create music using block programming
      2. allow users to visualize the amplitudes and frequencies of musical notes
      3. collect usage data for use in training artificial intelligence to offer music synthesis suggestions
    - Currently being used by **hundreds of students** in classes across **UVa, Blue Ridge Community College**, and several **local high schools**
    - **Front-End: HTML, JavaScript, CSS**
    - **Back-End: AWS, Firebase**
  - TensorSnap — *Aug 2021 – Present*
    - Developing a block-programming interface for TensorFlow to be used in machine learning courses for non-C.S. majors at UVa
    - **Front-End: TensorFlow.js, React, JavaScript**
    - **Back-End: Firebase**

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- ***Freelance App & Website Development***
  - Day Trippin' *Aug 2019 – February 2020*
    - Delivered a social media app in which users share about hikes and trips through certain points of interest; sourced through Upwork.com
    - **Front-End: React Native, JavaScript**
    - **Back-End: Firebase**
  - collegeunfiltered.com *March 2020 – April 2020*
    - Delivered a website where UVa students and alumni can anonymously answer various questions about attending school at UVa
    - **Front-End: React, JavaScript**
    - **Back-End: Firebase**
- ***Personal Projects, Hackathons, & Classwork***
  - AddressEye *May 2021*
    - Automated a Twitter bot that responds to mentions containing street addresses with satellite imagery of those addresses
    - **Back-End: Python, Docker, AWS**
  - Runner Royale *July 2019 – March 2020*
    - Prototyped a mobile game in which up to 100 users can race against each other in real time using the sensors on their phones
    - **Front-End: React Native, JavaScript**
    - **Back-End: Heroku, Firebase, node.js**
  - NYC 311 Map *Mar 2019 – May 2019*
    - Prototyped an app that leverages NYC's 311 API to populate a map with nearby and recent 311 reports
    - **Front-End: React Native, JavaScript**

Research Experience

- ***Aggressiveness Detection (Pace University)*** Aug 2018 – May 2019
  - Trained an acoustic model to differentiate between aggressive and non-aggressive tones (95% accuracy) and bullying and non-bullying statements (63% accuracy) using voice recordings from student volunteers
  - **Back-End: TensorFlow, Flask**
- ***Loading Screens and Tolerable Waiting Time (Staten Island Technical High School)*** Aug 2016 – May 2017
  - Determined that interactive loading screens produce high tolerable waiting times by programming websites in JavaScript/HTML/CSS to calculate the time it takes for a user to hit refresh as the websites load; experimented with secondary school end-users and developed a Google Chrome extension that renders an interactive loading screen over any website
  - **Front-End: HTML, JavaScript, CSS**

Awards & Achievements

- New York City Science and Engineering Fair (NYCSEF) Finalist, Contestant – June 2019, June 2018
- National Mu Alpha Theta Mathematics Award – June 2019
- New York City Hack-League Finalist – June 2019
- Quality of Life Innovations (WiSE Regional Program) Semifinalist – May 2017
- New York State Attorney General's 2015 Triple C Award (For Being Valedictorian of George L. Egbert Intermediate School) – June 2015
- Staten Island Borough President's Office's Certificate of Appreciation / Borough Leader Award – June 2017
- National Honors Society – June 2018, June 2019
- AP Scholar with Honor and Distinction Awards – 2015-2019