# Joseph E. Kerrigan

<u>jek4qv@virginia.edu</u> | Charlotte, N.C. linkedin.com/in/joseph-e-kerrigan | joek13.github.io

#### **Education**

#### University of Virginia, Charlottesville, VA

Anticipated Graduation: May 2023

B.A., Computer Science and Intended B.A., Mathematics

Honors: Jefferson Scholar, Echols Scholar

4.0 GPA, Dean's List

Providence Day School, Charlotte, NC

Top 10% of class, 1580/1600 SAT, 36/36 ACT

May 2019

### **Experience**

#### LEAD Technologies, Inc., Charlotte, NC

July 2019 – August 2019

Software Development Intern

April 2020 – July 2020

- Independently produced applications including an automatic document scanner for Windows, Android, and iOS using C# and Xamarin
- Designed and implemented a novel gradient descent algorithm to improve brightness and contrast on scanned documents

### theCourseForum, Charlottesville, VA

January 2021 – Present

Software Developer

- Worked at <u>theCourseForum.com</u>, a course review and scheduling site with over 41,000 users
- Coordinated with team and utilized CI/CD pipelines on collaboration platform GitHub
- Developed new features and fixed bugs using technologies like Django and PostgreSQL, deploying Python applications to cloud targets such as Heroku and Google App Engine

## UVA Mathematics Department, Charlottesville, VA

February 2021 – May 2021

Undergraduate Grader

- Graded homework assignments for over 50 students in MATH3100: *Introduction to Probability*
- Drafted emails rectifying student misconceptions and offering targeted assistance on problems

# **Leadership Roles**

## **UVa Club Running**

December 2019 – Present

Webmaster

- Elected twice as webmaster of an athletic CIO with more than a hundred active members
- Maintained club site virginia.clubrunning.org and ListServ with 1,300 subscribers
- Engineered a dynamic registration web application for annual charity race and built ranked-choice voting software responsible for counting hundreds of votes

PennApps XXI September 2020

Hackathon Contestant

- Led a team of four students in virtual hackathon
- Built a crowdsourced music discovery platform using Python, Django, PostgreSQL and deployed on cloud provider Heroku

#### **Technical Skills**

- *Programming/Scripting Languages:* Proficient in Python, C#, C/C++, Rust, Java, JavaScript/NodeJS, HTML/CSS, R; familiar with x86 assembly, LEAN, and Swift
- Frameworks and tools: Experienced with Django, Docker, Numpy, Git, Flask, Xamarin, Unity3D, ggplot, and shiny; familiar with React, Pandas, Matplotlib
- Able to design, deploy, and maintain containerized web applications to cloud providers such as Heroku or standard Unix servers using CI/CD pipelines