

# Joseph E. Kerrigan

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## Education

<b>University of Virginia</b> , Charlottesville, VA	Anticipated Graduation: May 2023
B.A., Computer Science and Intended B.A., Mathematics	
<i>Honors:</i> Jefferson Scholar, Echols Scholar	
4.0 GPA, Dean's List	
<b>Providence Day School</b> , Charlotte, NC	May 2019
Top 10% of class, 1580/1600 SAT, 36/36 ACT	

## Experience

<b>LEAD Technologies, Inc.</b> , Charlotte, NC	July 2019 – August 2019
<i>Intern</i>	April 2020 – July 2020
<ul style="list-style-type: none"><li>Independently produced applications including an automatic document scanner for Windows, Android, and iOS using C# and Xamarin</li><li>Designed and implemented a novel gradient descent algorithm to improve brightness and contrast on scanned documents</li></ul>	

## Open Source Contributions

<i>Volunteer Developer</i>
<ul style="list-style-type: none"><li>Contributed code to an image-processing library with over 2,500,000 downloads</li><li>Developed own open-source projects including chatbots and command-line interfaces</li></ul>

## Leadership Roles

<b>UVa Club Running</b>	December 2019 – Present
<i>Webmaster</i>	
<ul style="list-style-type: none"><li>Elected twice as webmaster of an athletic CIO with more than a hundred active members</li><li>Managed and maintained club site <a href="http://virginia.clubrunning.org">virginia.clubrunning.org</a> and club ListServ with over 1,300 subscribers</li><li>Engineered a dynamic registration web application for annual charity race and built ranked-choice voting software responsible for counting hundreds of votes</li></ul>	

<b>PennApps XXI</b>	September 2020
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<i>Hackathon Contestant</i>
<ul style="list-style-type: none"><li>Led a team of four students in virtual hackathon</li><li>Built a crowdsourced music discovery platform using Python, Django, PostgreSQL and deployed on cloud provider Heroku</li></ul>

<b>PDS Writing Club</b>	August 2018 – May 2019
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<i>Founder and President</i>
<ul style="list-style-type: none"><li>Founded Providence Day's Writing Club, an informal discussion-based club focused on literature appreciation and workshopping members' nonacademic writing</li><li>Contributed own writing alongside members' work to school literature magazine Pendragon</li></ul>

## Technical Skills

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