jrodal.dev github.com/jrodal98	Jacob Rodal	jr6ff@virginia.edu 703-283-9318
Experience		
Software Engineer	Facebook	Feb 2021 – Current
• Engineer working in Seattle.		
Research Assistant	University of Virginia	Sept $2019 - Dec 2020$
<ul> <li>Investigated the use of MANETs (Mobile Ad Hoc Networks) to enable a connected transport system between autonomous vehicles.</li> <li>Developed an Android mobile application to test the feasibility of ad-hoc communication between pedestrians and autonomous vehicles. Discussed the results in my Bachelor Thesis.</li> </ul>		
Software Engineer Intern	Facebook	May 2020 – Aug 2020
<ul> <li>Designed and built an internal framework that enables Facebook engineers to create complex, large scale campaigns to simulate the behavior of bad actors and bots on Instagram.</li> <li>Implemented support for simulating behavior relating to profile updates, content publishing, engagement, and interactions between Instagram users.</li> </ul>		
Software Engineer Intern	Leidos	May 2019 – Sept 2019
<ul> <li>Contributed to the development of open source simultaneous localization and mapping (SLAM) libraries in order to reconstruct 3-D point cloud models from real time video streams.</li> <li>Led the development of a rust web server capable of directing incoming video data into SLAM processes and directing SLAM data to connected clients.</li> </ul>		
Education		
BS in Computer Science	University of Virginia	Aug 2017 – Dec 2020
<ul> <li>BS in Computer Science, BA in</li> <li>Graduated with Highest Distin</li> </ul>		

- Graduated with Highest Distinction; Cumulative GPA of 3.94
- Selected Coursework: Machine Learning, Algorithms, Database Systems, Data Structures, Cybersecurity, Internet Privacy, Operating Systems, Linear Models, Linear Algebra, Time Series

## Personal Projects (Source Code Available on Github)

- Watch Scripts A tutorial for executing shell commands on your Linux computer from your smartwatch - 45+ stars on Github. Top 20 all time post on a unix subreddit with 260,000+ subscribers.
- **Brunnylol** A smart bookmarking/search management tool for browsers, inspired by Facebook's bunnylol. Webserver implemented using the Rocket Rust framework and deployed to a VPS.
- Screenshot Actions Implemented OCR and file manipulation actions for the Dunst notification daemon that users interact with through dmenu after taking screenshots 40+ stars on Github.

## **Technical Skills**

- Programming Languages: Python, Rust, Hack, Bash, C++, Java, R, HTML, CSS, SQL
- Linux: Debian, RPM, and Arch based distributions. Shell scripting with bash, zsh, and python.
- Others: Git, Docker, Django, QT, Tkinter, Opencv, Numpy, Pandas, Tensorflow, GDB