

# David Kyle Rivera

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<https://github.com/rivera-davidkyle>

## Education

### University of Maryland, Baltimore County

*Expected 05/2023*

- BS Computer Science, Minor in Music
- GPA: 3.86
- Relevant Coursework: Data Structures, Computer Architecture, Database Management Systems, Operating Systems, Design and Analysis of Algorithms, Software Engineering

## Skills

OOP Languages:	Python, C++, C
Web Development:	React.js, HTML, CSS, Javascript, API Development
Software/Frameworks:	Jira, Git, Docker, Django
Project Development:	Agile Methodologies, CI/CD, Test Driven Development

## Work Experience

### Atmospheric Lidar Group

Software Engineering Intern

*03/2022 - Present*

- Maintain and improve a microservices architecture given loosely defined customer requirements with Django Framework, Redis, Celery, and Docker
- Follow a directive through organized team sprints and a timeline based on given requirements through CI/CD and Github
- Developed an SMTP that periodically reaches out to more than 100 researchers through Celery and Redis
- Developed a download feature that lets users access more than 1000 daily files through Django REST Framework, with JQuery and Bootstrap used for the front-end

### UMBC Events and Conferences Services

Production Technician

*08/2021 - 03/2022*

- Provided services for events throughout the university campus and cooperate with event organizers to run conferences smoothly
- Assisted in event setups such as audio reinforcement, stage lighting, video projection, and stage rigging/drapery
- Managed sound system and gave on-site technical support during events

## Projects

Unified Ceilometer Network ([Unified Ceilometer Networks \(ucn-portal.org\)](https://ucn-portal.org))

- Store, display, and standardize data from Ceilometer LiDAR data from multiple EPA/NASA sites
- Developed through Python, C++, Bash, and MatLab

IT Ticketing Website ([ALG Helpdesk \(ticketingitapp.herokuapp.com\)](https://alg-helpdesk.ticketingitapp.herokuapp.com))

- Provides a helpdesk portal that assists a user to create, update, or delete a ticket
- Sends a confirmation email that the ticket has been received, and has a login/logout and user registration system
- Developed through Django Framework and Bootstrap

Sorting Algorithm Test and Analysis (<https://github.com/rivera-davidkyle/Sorting-Algorithm-Analysis>)

- Exports a CSV of runtime and memory of different sorting algorithms in varying array sizes and test cases
- Analyzes the significant values within the CSV through Regression Analysis
- Developed through C++, Jupyter Notebooks, Pandas, Scikit learn, and Numpy