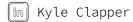
Kyle Clapper











PROJECTS

TAKE COUNTER | JAVASCRIPT, REACT, BOOTSTRAP, ELECTRON

2023 | https://takecounter.kyleclapper.dev/

- Helped an audio engineer track takes during recording sessions at Power Station by building a MacOS app.
- Improved user experience by adding re-assignable global keyboard shortcuts.
- · Increased development speed and reliability by building a CI/CD workflow with automated testing and deployment to AWS S3.

MCODE ISOTOPE | PYTHON

2021 | https://github.com/kclapper/MCODE-Isotope

- Improved readability and maintainability of a data retrieval program by refactoring the code base, following principles in "Clean Code" by Robert C. Martin.
- Improved the UX for the MIT NRL Reactor Engineer by simplifying the installation process and adding features such as a detailed help prompt.

BADSTATS | PYTHON

2021 | badstats.offtherailsradio.org

- Built a website to expose and visualize Spotify meta-data using Flask.
- Eliminated deployment cost by building a self managed Kubernetes cluster, using K3S, on Oracle Cloud Infrastructure.

EXPERIENCE

TEACHING ASSISTANT | ALGORITHMS AND DATA STRUCTURES

September 2022 - Present | UMass Boston

- Taught discussion sections where students get practice with lecture material.
- · Created additional course materials in response to student needs, including; slide decks, example programs, and puzzles.
- Graded student programming projects, including a written report.
- Held office hours to provide additional support to students.

MIT NUCLEAR REACTOR LABORATORY | SENIOR REACTOR OPERATOR

May 2019 - January 2022 | Cambridge, MA

- Passed NRC licensing exams for a Senior Reactor Operator license.
- Ensured the safety of personnel, the public, and the environment by supervising proper operation and maintenance of the reactor while on shift.
- Prevented a significant radiation accident by shutting down the reactor within 30 seconds after seeing alarms and abnormal equipment readings.
- Improved the accuracy of documentation by leading a group of 3 in updating procedures and training manuals to reflect equipment changes and best practices.
- Took a proactive role during a facility outage by leading operators on shift to finish tests and calibrations ahead of schedule.

91.5 FM WUML, LOWELL | CHIEF ENGINEER

December 2016 - May 2019 | Lowell, MA

- Increased the accessibility of audio engineering to club members by creating a standardized training and certification system.
- Assisted in the studio renovation by installing audio equipment, wiring logic circuits, and building a remote control and troubleshooting system.
- Ensured broadcast continuity by being on call 24/7 for equipment troubleshooting.
- Contributed to the annual charity benefit concert as the head organizer in 2016 and sound engineering coordinator in 2017 and 2018.

SKILLS

PROGRAMMING

Javascript • Python • Java Lisp • HTML • CSS

LIBRARIES/FRAMEWORKS

Electron • React • Bootstrap

TOOLS/PLATFORMS

GitHub • AWS • GCP • OCI Docker • Kubernetes • Ansible

EDUCATION

UNIVERSITY OF MASSACHUSETTS, BOSTON

MS COMPUTER SCIENCE May 2024 | Boston, MA College of Science and Mathematics Cum. GPA: 4.0

UNIVERSITY OF MASSACHUSETTS, LOWELL

BSE CHEMICAL ENGINEERING, **NUCLEAR OPTION** May 2019 | Lowell, MA Francis College of Engineering Cum. GPA: 3.16

CERTIFICATIONS

- CompTIA A+
- AWS Cloud Practitioner

COURSEWORK

- Applied Cryptography
- Database Management
- Operational Semantics
- Analysis of Algorithms
- Applied Machine Learning
- Compilers
- Theory of Computation