Ryan Koes

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EDUCATION AND HONORS

Bucknell University, Lewisburg, PA Expected May 2026

Bachelor of Science in Computer Science and Engineering | *Minor in Mathematics* GPA: 3.8/4.0

- Reed-Garman Award Fund for Engineering Entrepreneurship May 2024
- Deans List All Semesters

Lowell Catholic High School, Lowell, MA May 2022

High School Diploma | *Summa Cum Laude* GPA: 3.9/4.0

TECHNICAL SKILLS

Programming Languages

- Python, C, Java, JavaScript, R, C++, C, RISC-V, Bash, Rust, HTML

Frameworks, Libraries, and Tools

- Numpy, PyQt, matplotlib, pytorch, pandas, CSS, React, Node.js, Tensorflow, Scikit-Learn, Jupyter Notebook, RStudio, Git, GitHub, GitLab, JUnit5, Postman

Other Relevant Skills

- Linux, VSCode, Qt Creator, IntelliJ, PyCharm, Unity, Linux, Windows, MacOS, HTTP, Agile Methods, Pair Programming, Test-Driven Development

EXPERIENCE

Cyber Research Intern | *Peraton Labs, Bedford, NH* June 2025 - August 2025

- Researched and developed advanced signal processing methods for underwater acoustic communication systems.
- Collaborated with fellow interns and engineers to work on complex problems and integrate our approaches with advanced hardware systems.
- Explored various deep learning techniques, including CCNs, RNNs, and LSTMs, while getting hands-on experience with data collection.

Machine Learning-Enhanced Electronic Tongue | *Bucknell University* May 2024 - present

- Conducted interdisciplinary research on electronic tongue technology for unbiased characterization of coffee.
- Applied custom filtering and fitting methods, along with off-the-shelf ML methods to deliver descriptive analytical data on aqueous solutions.
- Presented at AIChE national conference (2024), AIChE regional conference (2025), and AIChE national conference (2025).

Interdisciplinary Data Science Center Fellow | *Dominguez Center for Data Science Bucknell University* Sep 2024 - May 2025

- Collaborated on data science projects, utilizing Python and advanced ML/Statistical packages.
- Supported Center activities by managing social media, organizing events, and promoting student engagement.

Application Development Compatible With Tidbyt API | *Bucknell University* May 2023 - Dec 2024

- Developed several private applications using Starlark compatible with Tidbyt devices.
- Gained experience with HTTP methods, Starlark programming language, data visualization methods, and API integration.

Teaching Assistant | *Bucknell University CSCI 306* Aug 2024 - Dec 2024

- Assisted students with labs on fundamental computer systems concepts showcasing hardware and software integration.

Teaching Assistant | *Bucknell University ENGR 100* Aug 2023 - Dec 2023

- Supervised students in interdisciplinary projects with 3D printing, laser cutting, and Arduino programming/components skills.

Retail Sales Associate | *Old Navy* May 2023 - Aug 2023

- Acquired soft skills such as communication, time management, and customer service.

ACTIVITIES

Google Developer Student Club | *Bucknell University Computer Science Dept.* Mar 2024 - Present

- Engage in regular events, activities, and projects. Typical events include workshops, collaborative projects, and hackathons.

Chemical Engineering Car Competition ElectroMechanical Team Lead | *Bucknell University Chemical Engineering Dept.* Aug 2023 - Present

- Designed car body and internal electrical components controlling stopping and moving mechanisms.

Nifty Fund Project Lead | *Bucknell University Makerspaces* Jan 2025 - Present

- Manage a project team to develop an automatic pour-over coffee brewer.

RoboLab | *Bucknell University Computer Science Dept.* Jan 2023 - Aug 2024

- Contribute to weekly discussion-based topics of HRI and HCI. Presented on robotics in film and media history.

Club Baseball | *Bucknell University* Aug 2022 - Present

- Assist team in games and weekly practices.

Eagle Scout | *Boy Scouts of America* Aug 2022