

Alexey Yermakov

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EDUCATION

B.S. Computer Science

B.S. Applied Mathematics

GPA: 4.0/4.0

University of Colorado, Boulder, CO

Expected Graduation Date: May 2023

ENGINEERING EXPERIENCE

Workiva, Intern

May 2020 – August 2020

- Worked on new features for an internal developer portal site.
 - Upgraded quality of search results through search relevance using TF-IDF. (Golang)
 - Improved site functionality by introducing pagination. (Javascript, HTML, CSS, Golang)
 - Increased site reliability by preventing Cross Site Scripting (XSS) attacks. (Golang)
 - Enhanced page navigation by adding icons to search results. (Golang, HTML, CSS)
- Produced video to demo the team's training project at the company's internal developer conference. (Adobe Ai, Ps, Pr)

Netflix Prize Project

March 2020 – April 2020

Matrix Methods (APPM 3310) – CU Boulder

- Successfully beat Netflix's 2006 score for predicting user ratings using the same data set.
- Researched and applied advanced linear algebra and calculus topics (SVD and gradient descent).
- Wrote and optimized the entirety of a machine-learning algorithm in C++.
- Learned about, installed, and utilized, the C++ Boost library for data serialization.
- Link with final report: <https://github.com/yyexela/MatrixProject>.

Arcade Machine Project

Oct 2018 – May 2019

Senior Project – ThunderRidge High School

- Designed and built an arcade machine cabinet from schematics to woodwork. (Google SketchUp)
- Wired joystick, buttons, screen, and Raspberry Pi, using online manuals.
- Configured and installed an operating system (Raspbian) to the arcade machine computer.
- Presented the final project to a board of judges, complete with a demonstration.

Bluetooth Light Switch

Personal Project

Jan 2018 – Feb 2019

- Designed and 3D printed a wall mount using schematics and CAD. (TinkerCAD)
- Designed wiring diagrams for the entire system for documentation and future use. (Fritzing)
- Improved existing Arduino open-source software by adding buffered input. (Arduino C++)
- Link: <https://github.com/yyexela/Arduino-Bluetooth-Light-Switch>.

TECHNICAL SKILLS

Certificates

- Linux Professional Institute Linux Essentials.

Languages

- C++, C, Golang, Bash, Java, Mathematica, JavaScript, HTML, CSS, MATLAB.

Software

- Linux, MS Windows, MacOS, Bash, Vim, GDB, Visual Studio Code, Cygwin, Adobe Illustrator, Adobe Premiere Pro, Adobe Photoshop, Audacity, MS Word, MS Excel, MS PowerPoint.

LANGUAGES

Fluent in English and Russian.