

Austin T. Gill

CONTACT INFORMATION

(970) 302-5778 (Cell)
austin.gill@mines.sdsmt.edu
📄 github.com/notgnoshi

MAILING ADDRESS

Austin Gill
37815 WCR 51
Eaton, CO 80615

EDUCATION

- **South Dakota School of Mines and Technology**, Rapid City, SD
M.S. Computational Sciences and Robotics
Degree expected: Dec 2019 (**GPA: 4.0**)
- **South Dakota School of Mines and Technology**, Rapid City, SD
B.S. Applied and Computational Mathematics. Minor: Computer Science
May 2018 (**GPA: 3.98**)

EXPERIENCE

- **Software Engineering Intern** Sencore Inc. May 2017 — Aug 2017
May 2018 — Aug 2018
Sioux Falls, SD

Implemented software decoders and unit tests for H.264 video, MPEG 2 video, and MPEG 2 audio. Expanded the capabilities of an AAC audio decoder to detect the presence of Spectral Band Replication and Parametric Stereo extensions.

Added application support for RTMP streams, which involved low-level Linux networking, application design, multithreading, and web development work.

- **Graduate Teaching Assistant** SD School of Mines & Technology Aug 2018 — Present
Rapid City, SD

Taught introductory programming labs emphasizing foundational C/C++ concepts and best practices, including proper Git usage and unit testing. Graded programs and exams, and offered feedback on areas of improvement.

- **Supplemental Instructor** SD School of Mines & Technology Aug 2016 — May 2018
Rapid City, SD

Tutored, prepared, and certified Calculus II students for exams by hosting supplemental sessions, office hours, and topical workshops.

PROJECTS

- 📄 github.com/notgnoshi/robotics
 - Graduate coursework in robotics
 - Leveraged methods in scientific computing to solve problems in map design, path planning, kinematics, optimization, and sensor filtering.
- 📄 github.com/notgnoshi/parallel
 - Graduate coursework in parallel computing
 - Designed projects implementing shared memory, CUDA-accelerated, and distributed parallelism
- research.agill.xyz
 - Undergraduate research project to research and implement a complex contour integral eigensolver
 - Successfully implemented component to count eigenvalues within some domain in the complex plane
- notgnoshi.github.io
 - A personal record of memorable learning experiences and course topics

SKILLS

- Language experience with Python, C++, C, Bash, Julia, Matlab, R, JavaScript, Java.
- Workflow experience with Git, Makefiles, SCons, shell scripting, and unit testing.
- Strong mathematical modeling skills in numerical linear algebra, statistics, numerical optimization, and scientific computing.
- Teaching experience in various mathematics, Python, and Linux areas in both formal and informal settings.
- Technical document and diagram production using \LaTeX .

ACTIVITIES & LEADERSHIP

- Previous Vice President of SDSMT Robotics Team
- Previous Vice President of SDSMT Mathematics Club
- Member of SDSMT Association of Computing Machinery