# Malcolm Groves

(802) 989-3257 • macgroves@gmail.com GitHub • LinkedIn • Portfolio

Software engineering is at the intersection of my passions for solving puzzles and teamwork. I started coding in college and spent the past year expanding my skill set. I am seeking opportunities to create impactful full-stack solutions in a company with a startup culture.

#### **PROJECTS**

## **Handwritten Digit Recognition** (C++)

GitHub

A nature-inspired genetic algorithm / neural network hybrid

- Achieves >93% accuracy after compressing images to 32-symbol strings.
- Outperforms a simple neural network by >10% with 75% fewer nodes.

### **JOHN** (Ruby on Rails, JavaScript)

Live • GitHub

Crowd-sourced restroom locator

- Responsive single-page web application with JavaScript front-end.
- Queries a Rails API attached to a geo-indexed database.

## **Buck Tagger** (Ruby on Rails, Javascript)

Live • GitHub

The social network for hunters

- Implements Google Maps API and Google Geocoding API.
- Generates geospatial statistics for deer hunts.
- Passwordless user authentication with oauth.

Languages: Java, C++, JavaScript, HTML, CSS, SQL, Python, MatLab

Frameworks & Technologies: Rails, git, ¡Query, React

## **EXPERIENCE Dublin School** (Chemistry Teacher, Coach)

Sept 2017 - Present

• Collaborated with STEM faculty to design a curriculum that incorporated technology into labs and projects.

## **Bowdoin College** (Student Researcher)

Jan 2016 - May 2017

- Presented first known characterization of excited-state proton-transfer kinetics of 8N2OH at National ACS Conference in San Francisco.
- Developed MatLab programs for results visualization, signal deconvolution, and regression analysis of steady-state systems.

## **EDUCATION**

## **Bowdoin College** (B.A. in Chemistry)

GPA: 3 84 / 4 00

- Phi Beta Kappa, Dean's List (2014-17)
- Nordic Ski Team: Captain 2015-16 & 2016-17, top male skier 2016-2017, Academic All-American (2014-17)

## MISCELLANIA

- Current record holder on the 18 mile NH Presi Traverse
- 2018 Birkebeinerrennet Merket qualifier
- GRE: Math 169 / 170, Verbal 170 / 170