# Ian Johnson

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# Summary

I am a quick and versatile learner, adaptable to a variety of challenging situations and tasks. I have a strong background in mathematics, as well as experience in computer programming.

#### **Education**

University of Virginia May 2017

B.A. in Mathematics (advanced track) and Physics

Overall G.P.A.: 3.96

- Echols Scholar
- Edwin E. Floyd Prize in Mathematics (2017)
- Intermediate Honors (2016)
- Dean's List (Spring 2015, Spring 2016, Fall 2016)

## Experience

Volunteer Tutor September 2017–Present

FACETS Centreville, VA

- Teach computer, math and English skills to adults and children in a low-income community.
- Provide proactive technical support to community center.

#### **Undergraduate Physics Researcher**

April 2015-September 2017

UVa Solid Polarized Target Group

Charlottesville, VA

- Develop simulations and mathematical models from systems of differential equations and real data.
- Design and implement software to assist in lab tasks.

#### **Undergraduate Mathematics Researcher**

May 2016-July 2017

University of Virginia

Charlottesville, VA

- Apply individual study of new material to research efforts.
- Collaborate with research adviser to investigate novel concepts.

## Vice President and Secretary

May 2015-May 2017

Kinetic Sound

Charlottesville, VA

- Co-founded successful student organization.
- Coordinate logistics of large-scale events with over one hundred attendees.

#### **Skills**

## **Computer Proficiency**

- Experienced with Windows and GNU/Linux systems (day-to-day usage and basic administration)
- Proficient in Microsoft Office (Word, Powerpoint, Excel) and equivalent products

#### **Programming**

- Languages: C, JavaScript, Rust, LabVIEW, C++
- Web tools: HTML, CSS, JSON
- Development tools: Git, make, NPM/Yarn, GCC, POSIX shell scripting
- GitHub: https://github.com/ianprime0509

#### **Publications and presentations**

- Spin nilHecke algebras of classical type (https://arxiv.org/abs/1706.06240)
- Chain Posets (https://arxiv.org/abs/1802.05813)

Automated Microwave Frequency Control in Dynamic Nuclear Polarization Experiments (http://meetings.aps.orlink/BAPS.2016.APR.K10.2)	·g/