

# Aaron Kelly

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**92% of a BS Mathematics at University of Wisconsin-Madison | Emphases in CS & Physics**

## Professional Experience

**Jahn Research Group - *Research Specialist* | June 2019 – May 2020** Madison, WI

- Strategy and literature reviews for publications advancing congressional and national security policy in food systems. Coordination between govt. and academic agencies to build institutional legitimacy
- Wrote and published book chapter for US Special Forces report on food systems.
- Conducted due diligence on emerging disaster tech startup companies for \$300MM venture fund.

**RateLinux - *Software Developer* | January - May 2019** Madison, WI

- Optimized scalability of database infrastructure using Azure SQL Database, implementing a system for adjusting usage between preset buckets to saving \$5k- \$10k monthly.
- Created a separate logging database to track usage, make regular API calls to monitor and update database status, automated with bash script integration with the main C# codebase.

**Quad/Graphics - *Software Intern in Data Science & Optimization* | May - August 2018** Sussex, WI

- Built & integrated new large scale non-linear manufacturing optimization model into older codebase.
- Achieved \$500,000/yr in savings by implementing clustering algorithm and validation in C#.
- Presented talk on convex optimization to 20+ member company-wide analytics group.

**Greenheck Fan Corporation | January - August 2017** Schofield, WI

### ***Manufacturing Engineering Co-op***

- Analyzed manufacturing process to create \$125,000/yr in savings and implemented capital project.
- Extended assembly capacity two years for major product fabrication lines to meet growth forecast.
- Developed new graph theory based company method to map and reorganize plant layout. Initiated a strategic plan to integrate the solution and gain buy-in from multiple levels of management.

**Forest Springs Camp and Conference Center | Summers 2015 - 2016** Westboro, WI

### ***Staff Counselor* | 2016**

- Oversaw 110+ summer staff, managed schedules, responsible for conflict resolution and mentorship.

## Other Work Experience

**AMCS - *Carpenter* | December 2020 - October 2021** Madison, WI

- Learned a new trade. Rough framing for new construction apartment buildings.

**Alm Custom Carpentry - *Carpenter* | November 2021 - May 2022** Salt Lake City, UT

- Rough framing for high end mountain homes on Utah ski resorts. Achieved Journeyman level skillset.

**Self-Employed Carpenter | January - November 2023** Brooklyn, New York

**Technical Skills:** Experience in C#, Java, JS/React. Familiarity with Python. Coursework in Algorithms, Artificial Intelligence, Optimization, Linear Programming, Stochastic Modeling.

## **Miscellaneous Activities**

- Further classes towards mathematics degree September 2024-2025, Madison, WI
- 10k received in grants for book about special interests in language, epistemology, phenomenology
- Invited to Medley Residency for creatives and writers, September - December 2022, Berlin, Germany
- Raised 50k for various community causes and personal research initiatives

