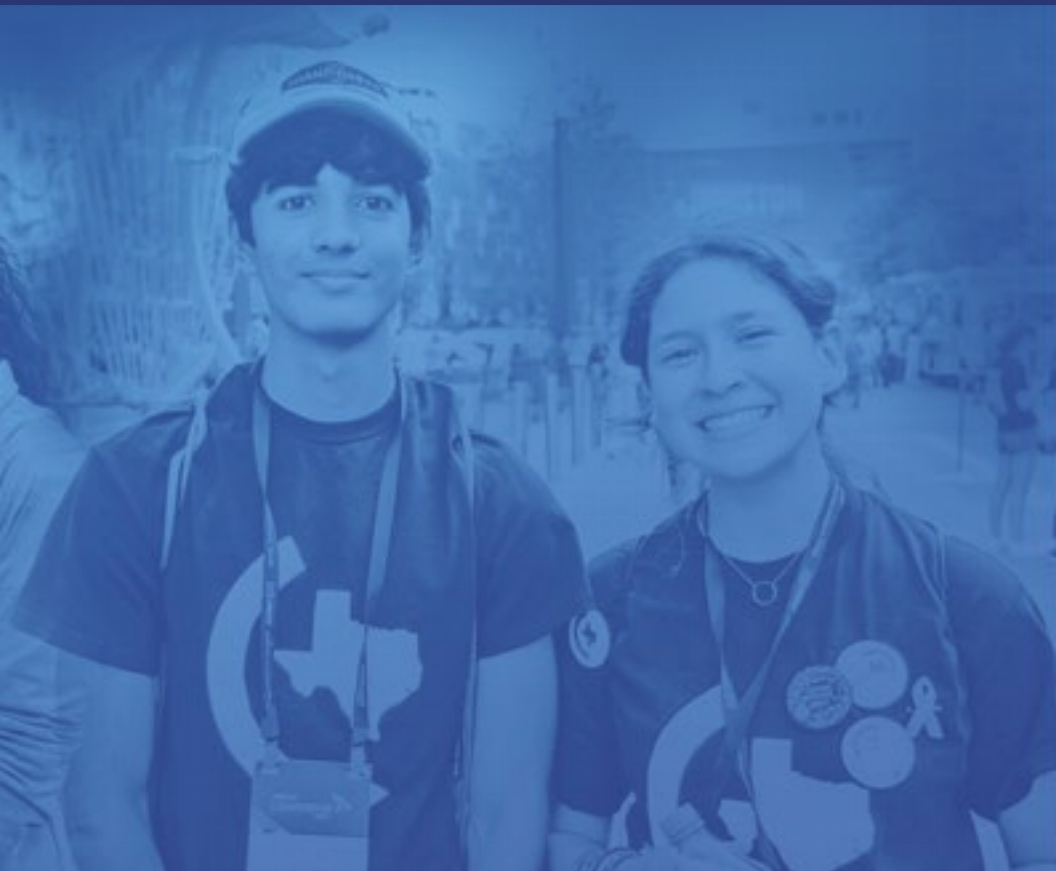




ALUMNI HANDBOOK

YOUR GUIDE TO EDUCATION, CAREER, AND
GOING BEYOND WITH YOUR *FIRST*® EXPERIENCE



CONTENT

1

Introduction Page 4

Why it's awesome to be a *FIRST*® alum

2

Education Page 8

Make the most of your *FIRST* experience if education is the next step on your path

3

Career Page 18

How to ace your resume and job interviews

4

...And Beyond Page 28

How to win *FIRST* friends and influence the next generation

SECTION

1



INTRODUCTION

EDUCATION

CAREER

...AND BEYOND

Dear *FIRST*® alum,

Welcome to the rest of your life!

You may be thinking, “I miss *FIRST*.” The good news is this: As a *FIRST* alum, you are part of the *FIRST* community for life. We’re here for you when you need us (and we give great high fives when you’ve got something to celebrate).

You may be about to graduate high school, a recent grad, or looking to make a career change. You may be wondering, “What should I do next?” Enlist in a public service? Pursue a degree? Seek opportunities in a new industry? Get certified in a skilled trade?

That’s a deeply personal question, one only you can answer. But the good news here is that your *FIRST* experience and network can help you find a meaningful, fulfilling career by pursuing any of those paths.

We’ve designed this handbook as a resource for you and your entire network of *FIRST* alumni. We’ll share tips, advice, and stories from your fellow *FIRST* alumni to help you make the most of your *FIRST* experience. We’ll also share how you can stay connected to your robot friends – and keep the inspiration flowing – through the *FIRST* community.

Every career journey is different, so we’ve included some notes pages in the back to help you customize yours.

We’d love your feedback on the *FIRST* Alumni Handbook. Send your thoughts to alumni@firstinspires.org.

**Peace, love, and robots,
Your friends at *FIRST***

FIRST prepares students for a STEM future.

By their fourth year of college, **FIRST alumni** are more likely to be majoring in STEM (Science, Technology, Engineering, and Math) fields than comparison group peers.

Declare a major in STEM

FIRST ALUMNI

81%

COMPARISON GROUP

58%

Declare a major in engineering or computer science

FIRST ALUMNI

68%

COMPARISON GROUP

29%

Young women in *FIRST* have significant gains in all STEM areas including STEM interest, career interest, activity, knowledge, and identity compared to young women in the comparison group.

Declare a major in engineering or computer science

FEMALE FIRST ALUMNI

51%

FEMALE COMPARISON GROUP

16%

More likely to take courses in engineering or computer science

3.4x

COMPUTER SCIENCE

2.6x

ENGINEERING

"x" = times as likely

FIRST students are significantly more likely to show **gains in STEM outcomes** than comparison students.

2x

STEM Interest
STEM Career Interest

STEM Knowledge
STEM Activity

STEM Identity

"x" = times as likely

Detailed information about the study can be found at www.firstinspires.org/impact.

SECTION

2



INTRODUCTION

EDUCATION

CAREER

...AND BEYOND

“

***FIRST* sparked my love for management and observing people’s behaviors. While I loved doing the STEM portion of things, nothing gave me more joy than talking to people to network, make friends, and gather resources for my team. I chose to attend community college because of the opportunities it gave me within my community, especially with *FIRST!* Staying local has allowed me to volunteer with people I know, while furthering STEAM education in my hometown.**

”



PAIGE PATZ

FIRST alum + community college student



SCHOLARSHIP OPPORTUNITIES

Colleges and universities value the skills that *FIRST* alumni bring to their campuses, and some even make scholarships available for you. The cost of school and value of scholarships are one part of the decision on which pathway is right for you. Consider other important factors when exploring education such as:

- Your end goals or fields of study you're interested in.
- Opportunities available to you after graduation.
- Community culture.
- *FIRST* alumni groups on campus.



It's never too early for you to establish professional online resume profiles on platforms like LinkedIn and Tallo. Use them to show schools, scholarship providers, and companies the impact of your *FIRST* experience. You can also grow your network on these platforms throughout your career.



How does the *FIRST* Scholarship Program work?

- In addition to the experiences you have in *FIRST* that have prepared you to apply for any scholarship opportunities you find, the *FIRST* Scholarship Program also has opportunities exclusively available to the *FIRST* community.
- *FIRST* Scholarships are funded and administered by *FIRST* Scholarship Providers. Scholarship providers are primarily four-year colleges and universities, but also include community colleges, technical schools, corporations, and associations.
- Most *FIRST* Scholarships are merit-based scholarships and may be renewable each year by maintaining an acceptable academic average.
- Each scholarship has its own application process and may require an essay and/or a recommendation letter from a mentor or coach. Find applications, deadlines, and more at www.firstinspires.org/alumni.

What if there aren't any *FIRST* Scholarships for me?

- Your *FIRST* experience is still incredibly valuable when applying for non-*FIRST*-specific scholarship opportunities. You have hundreds (or maybe even thousands!) of hours put into *FIRST*. You've gained all kinds of skills and have stories to answer any essay question thrown at you.
- Ask your chosen school what internal scholarship opportunities you may be eligible for.
- Look for scholarships in your community or through professional associations in related fields. Think about the organizations you or your family are engaged with and explore opportunities for scholarships that they may provide.
- Check out online scholarship aggregators like [fastweb.com](https://www.fastweb.com), collegeboard.org, and tallo.com.



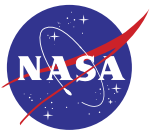
Not sure if college is the right step for you? There are lots of resources for exploring your pathways like American Student Assistance Futurescape™, asafuturescape.org.



INTERNSHIP AND CAREER OPPORTUNITIES

Companies that support *FIRST* want to hire **YOU**. *FIRST* Strategic Partners like NASA, Qualcomm, and Rockwell Automation post career and internship information for *FIRST* alumni at www.firstinspires.org/alumni.

Some supporters, like BAE Systems, even have specific internships for *FIRST* participants/alumni, and others, including branches of the U.S. military, ask if you're a *FIRST* alum as part of their application form.





For many students, myself included, *FIRST* was a vehicle that helped to create a spark while developing values and traits such as *Gracious Professionalism*[®], *Coopertition*[®], and grit. As a *FIRST* alum, I received a *FIRST* STEM Equity Community Innovation Grant to help spread the vehicle to impact more students. I'm excited to see *FIRST* continue to impact the lives of so many others, just as it has my own.





CHELSEY ROEBUCK

FIRST alum + community nonprofit leader

SECTION

3



INTRODUCTION

EDUCATION

CAREER

...AND BEYOND



When you become a *FIRST* alum, you understand just how wide the *FIRST* network reaches and just how willing and excited that network is to help you achieve your goals. I got involved with *FIRST* years ago, and it's been amazing to see the ways in which *FIRST* and the connections I formed through it have shaped my journey ever since. I graduated from a *FIRST* partner school, Yale University, and now work as a mechanical engineer for Dean Kamen's R&D company, DEKA, where I get to work every day on really cool, life-changing medical technology.





NAOKA GUNAWARDENA

FIRST alum + mechanical engineer



SUMMARY

A meticulous designer with experience guiding projects from inception to resolution.

Uses 7 years of *FIRST* mentorship and 4 years of visual design experience to complete projects in STEM and design related fields while managing and coordinating 100 person teams.

CERTIFICATES & AWARDS

Creativity & Creative Problem Solving

Sheridan College & SUNY Buffalo State, May 2019

Oakville *FIRST* Hero

Town of Oakville, Dec. 2019

Mental Health First Aid for Adolescents

Mental Health Commission Canada, Nov. 2019

Certificat d'Études Françaises

Halton District School Board, Jun. 2015

Solidworks Associate

Javelin Technologies, Aug. 2014

SKILLS

FIRST Lead Mentor
FIRST Event Organizer
Team Management & Organization
Creative Problem Solving
Graphic Design
3D Modelling & Laser Fabrication
Adobe Creative Cloud
Web Design & Maintenance

ASSOCIATIONS



KASS WRENCH

Strategic Designer & STEM Educator

KassWrench@exampleemail.com | (123) 456-7890

LinkedIn.com/in/KassWrench

123 Alumni Way | Oakville, ON, Canada | A1A 1A1

EDUCATION

Sep '15 - Present

Honours Bachelor of Interaction Design

Certificate in Creativity & Creative Problem Solving

Sheridan College, Oakville ON Canada

In partnership with *FIRST* Canada, researched, designed, & produced a traveling robotics education experience. This year long senior project utilized design sprint frameworks, rapid prototyping, and creative problem solving tactics.

EXPERIENCE

Jun '19 - Present

FIRST Alumni & Sponsor Relations Intern

FIRST Headquarters, New Hampshire USA

Assists in developing strategic initiatives for key partners from 2020-2025. Designing and creating informational booklets for prospecting clients and providers. Manages social media and blog post curation on global website.

May '18 - Aug '18

Public Creativity Intern

Sheridan College, Oakville ON Canada

Worked in interdisciplinary studio to research, design and propose enhancements to Community Public Spaces & feelings of belonging within a space.

Featured at Art Gallery of Mississauga Jan-Mar 2019. Permanent display at Sheridan College

May '16 - Aug '17

Junior Interactive Design Intern

Geotab Inc., Oakville ON Canada

Researched, designed, and assisted in creation of customer marketing resource in addition to content management upon creation of the portal.

Sep '15 - Present

FIRST Mentor & Technologies Class Assistant

Oakville Tragalgar High School, Oakville ON Canada

Leads meetings of 60-100 students in planning future community engagement, team strategy, and marketing content. Currently managing web and social media content marketing in addition to maintaining communications with team sponsors and implementing community outreach through volunteering events.

CAREER OPPORTUNITIES

Any meaningful participation you've had in *FIRST* is relevant experience for a work environment, whether you led the programming team, presented to sponsors, or coached a *FIRST* LEGO League team.

FIRST is real-world experience and should be presented as such on your resume. Note your role(s) on your team and projects, awards, and achievements, and capture any additional volunteer experience, too.

Not sure how to highlight your accomplishments? Check out the resources at www.firstinspires.org/alumni.

Resume tips

- The summary section is your elevator pitch to companies – and a chance to show your passions.
- Were you nominated for a Dean's List Award, or did your team receive the Chairman's or Inspire Award? Note relevant awards, certificates, or recognitions.
- List important skills and relevant industry keywords so recruiters will find you.
- List *FIRST* activities as school activities, accomplishments, and extracurriculars.
- Use full program names.



FIRST Robotics Competition



FRC

- Use action verbs like “designed” and “managed” to define your ownership of a task and highlight holistic skills (like project management, teamwork, and communication) using specific examples of how your skills improved results for your team.
- Research resumes from your target industry to identify standards for resume template and length.



Make sure to identify yourself as a *FIRST* alum on networking platforms like LinkedIn and Tallo!

CHOOSING YOUR CAREER PATHWAY

Meaningful, fulfilling, and good-paying careers are available no matter what pathway you choose after high school. While certain jobs require higher levels of education, there is growing demand for professionals to fill jobs in the middle of the labor market, such as manufacturing, machinery operation, inspection, electronics, mechanics, and healthcare technicians.

Opportunities abound in these “middle skills” careers, which require more than a high school education, such as a certification or apprenticeship, but less than a four-year college degree. These careers are more advanced and safer than they once were, requiring a whole range of skills, from advanced technology and digital literacy to problem solving and teamwork – skills you have as a *FIRST* alum. Many companies are eager to hire *FIRST* alumni to fill these roles.

Middle-Skills Job Opportunities

PERCENTAGE OF THE U.S. LABOR MARKET THAT CONSISTS OF MIDDLE-SKILLS JOBS

53%

PERCENTAGE OF THE U.S. WORKERS WHO ARE TRAINED TO THE MIDDLE-SKILLS LEVEL

43%





ACE YOUR INTERVIEWS

Many industry leaders want to hire *FIRST* alumni like you for your problem-solving, critical thinking, and digital literacy skills. It's important that you communicate your experience, knowledge, skills, and abilities on your job application and in your interview. *FIRST* Strategic Partners Dow and Qualcomm offer great advice on their websites to help you succeed. Here are just a few of their tips:

- Your experiences beyond your previous work roles are important. Use your volunteer and extracurricular activities to highlight your accomplishments.
- For your interview, have a few personal stories in mind that demonstrate your skills, experience, and style. These “behavioral” interview questions help a potential employer understand your capabilities and fit.
- And finally, send (or email) a follow-up note and thank you. Expressing your interest in the position and appreciation to the hiring team for their time can never hurt. Your recruiter can forward your message along to the team.



It's helpful to talk about your *FIRST* experience in your interviews, not only because it's relevant, but because you may discover your interviewer is part of the *FIRST* community, too.



NEIL PARIKH

FIRST alum + sleep startup co-founder

***FIRST* alumni are part of a network of innovators, changing the world one dream at a time.**

Neil Parikh realized the wellness industry wasn't focusing on how we sleep, so he left medical school to co-found Casper, a sleep products company with a mission to help the world sleep better. "I've been working on sleep, but I think *FIRST* can really prepare you to solve any number of the world's big problems, whether it's clean water or building bridges or figuring out how to develop new aircraft that are more fuel efficient," Neil said.

Through *FIRST*, Neil learned valuable leadership, public speaking, fundraising, and programming skills, while making friends around the world – which turned out to be great prep for the startup world. "*FIRST* completely changed my life. It gave me a set of friends, a set of mentors, a learning opportunity, and a platform to actually go out into the world and understand how the science works, and then talk to people about it," he said. "It's always been a reference point to think about what kind of person I want to be, how to learn about new things in the world, and how to keep growing."

SECTION

4



INTRODUCTION

EDUCATION

CAREER

...AND BEYOND



Every opportunity to engage with the community and educate others is what inspired me to go get a degree in education in the first place. Being a part of *FIRST* helped me find who I am. Knowing I could help bring these opportunities to other students made me jump at the chance to serve. The experiences I had, while challenging, were incredibly rewarding. I made amazing friends and connections that helped me achieve not only my service goals but personal goals.





KATE SAMPLE

FIRST alum + education specialist, MPA, MS



STAY CONNECTED

Your *FIRST* network isn't limited to your former teammates or friends you met at events. There are *FIRST* alumni all around the world who share your passions and experience with our community – people who have also repeated the phrase, “I can't... I have robotics,” more times than they can count.

Joining a *FIRST* alumni group is the easiest way to connect with *FIRST* alumni wherever you are. The *FIRST* Alumni Networking Group on LinkedIn was designed to connect *FIRST* alumni to one another for education and career guidance, mentorship, and opportunities.

Local *FIRST* alumni groups have grown across the world to engage and support *FIRST* alumni on college campuses, in regional areas, and at companies. Join or start a group at www.firstinspires.org/alumni/alumni-groups.



Be sure your firstinspires.org dashboard account is under your active email so we can stay in touch and share news, tips, and opportunities. The dashboard is also your place to register *FIRST* teams, become an event volunteer, and log your volunteer hours.

ATTEND *FIRST* EVENTS

For *FIRST* students, mentors, and coaches, few things are more meaningful than seeing alumni come out to competitions to support the team. Showing up at a *FIRST* event and visiting the pits is a great way to support your team and inspire all *FIRST* students. Plus, we know you miss the thrill of competition days.

Even if you no longer live in your hometown, there's likely a *FIRST* event happening near you this year. Whether you're looking for a bit of inspiration, for a chance to meet new people or network with like-minded peers, or just for something to do on a weekend, check out an event near you at www.firstinspires.org/team-event-search.

FIRST and its supporters also host special events just for *FIRST* alumni. These are great opportunities to meet fellow alumni and industry leaders, catch up with *FIRST* friends, and seek out advice or inspiration.



Follow *FIRST* on social media to keep up with season announcements, cool opportunities for students and alumni, and FOMO-inducing dispatches from *FIRST* events.





STAY INVOLVED

There are lots of ways to stay involved and give back to *FIRST* after becoming a *FIRST* alum. Many alumni are still involved in *FIRST* as mentors, coaches, or event volunteers. You may already be familiar with mentor/coach roles and event-day volunteering opportunities from the *FIRST* program(s) you participated in. BUT did you know that roles and time commitments vary from one program to another? You can volunteer for *FIRST* for as little as a few hours a season.

Volunteering is an awesome way to stay involved with *FIRST* and really pay it forward to the next generation. It's also a chance for you to continue building valuable skills and meaningful connections to advance your own career and personal development goals.



As a *FIRST* alum, you know what an impact participating can have on a person's life. For nonprofits like *FIRST*, every dollar makes a difference. If you can, make a small donation to *FIRST*, start a social media fundraiser, or talk to your employer about becoming a sponsor.

Getting started as a *FIRST* volunteer

I have a few hours or a few days to give:

As a *FIRST* event volunteer, you can join the global support system we've built to help young people find what makes them come alive – and be re-energized yourself. Find an event volunteer role that fits your personality: Get in the center of the action as a referee or field reset, or support teams in the pits as a judge or pit admin.

I'm looking for a long-term commitment:

As a *FIRST* team mentor or coach, you can empower young people to think big and feel hopeful for their future. You don't need particular expertise, but you do need a schedule that lets you make a reliable mentorship commitment throughout the season (varies by program and team). Online mentor training is available through *FIRST*.

To browse local volunteer opportunities and get started as a volunteer, create a *FIRST* dashboard account at firstinspires.org.


Looking for a team to mentor? The *FIRST*® Mentor Network sponsored by NI is an interactive platform allowing teams and interested mentors to easily find each other for virtual or in-person mentorship. Create a profile stating your skillsets and interests on the *FIRST* Mentor Network, then search for and message teams to support. Get started at info.firstinspires.org/mentor-network.





NICKI BONCZYK

FIRST alum + mechanical engineer



FIRST alum Nicki Bonczyk discovered her passion for engineering after joining her FIRST Robotics Competition team in west Michigan. After high school, she studied product design and manufacturing engineering, and while volunteering at a *FIRST* event, she learned about career opportunities at *FIRST* sponsor JR Automation. She took an internship and eventually landed a full-time job as a mechanical engineer working on robots (sound familiar?).

Recognizing the importance of the skills and passion she developed in those early days on her team, Nicki continues to do her part in making sure other students get the same benefits from *FIRST* that she did.

She encourages her coworkers to join her in volunteering at the many *FIRST* events in Michigan. She also mentors local teams with her parents. "Volunteering has allowed me to grow my *FIRST* family in ways I never thought I would," she says, "and I have one amazing extended family thanks to *FIRST*!"



ALUMNI RELATIONS

www.firstinspires.org/alumni

alumni@firstinspires.org

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