



2019-20 NCWIT Award for Aspirations in Computing Application

APPLICATION DUE November 5, 2019 by 8PM MT

In this document, you will find all content for the 2019-20 NCWIT Award for Aspirations in Computing Application. Please note this document is meant to provide an overview of the entire application.

If you or your student do not have internet access or have difficulty completing the application online and need to apply offline, please reach out to AiChelp@ncwit.org.

To apply, you must create an account to complete the application online:

1. Visit aspirations.org
2. Click on "Register" at the top right of the screen
3. Register a new account as a high school applicant

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Parent/Guardian Information:

If you are under 18 years of age, please include your parent contact information for them to complete the consent form.

Parent/Guardian First Name – required

Parent/ Guardian Last Name – required

Parent/Guardian Email – required



Educator Endorser:

Please share the contact information for a teacher, mentor, coach, counselor, etc. who you would like to endorse your application. We recommend you notify your educator that they will need to endorse you after you submit your application. Educators must submit endorsements by November 12, 2019. We will contact your educator to complete the endorsement after you submit your application.

Educator First and Last Name – required

Relationship (Teacher, Coach, Instructor, Other) – required

School or Organization

Educator e-mail address – required



1 | Personal Information

Please complete the following fields.

Your First and Last Name – required

Your Complete Mailing Address – required

Please use this format to enter your address:

101 NCWIT Ave.
Apt. 101
Boulder, CO 10101

Your School Name – required

Your Phone Number – required

Please use this format:

111-222-3333

May we contact you by text message at the number you provided above regarding this application? (Phone service provider charges may apply.) Please circle or highlight one of the options below. – **required**

- Yes, you may contact me by text message at the number above.
- No, you may not contact me by text message at the number above.



2 | Experience with Technology

Please complete the following fields.

Note that all responses in this section are scored unless otherwise noted.

Please read all of the prompts before beginning. You may want to use a word editor for your responses before submitting. Save your progress frequently. Recommended response length is 100 to 250 words.

Please describe what sparked your interest in computing and technology and how has that interest furthered your experience in computing and technology? – required

Response must be between 25-250 words.

Tell us what you have been doing with technology and be sure to give us specific details on your technology skills and activities. – required

Response must be between 25-250 words.

(OPTIONAL) If you have examples demonstrating your efforts and experience that you would like to share with us - such as a personal website, portfolio of Tech work, or video demonstration, provide link(s) to the content. (URLs only; no uploads permitted)



3 | Future Plans

Please complete the following fields.

Note that all responses in this section are scored unless otherwise noted.

Please read all of the prompts before beginning. You may want to create your answers in a word editor before pasting in here. Save your progress frequently. Recommended response length is 100 to 250 words.

Please describe how you would like computing and technology to be a part of your career goals. – required

Response must be between 25-250 words.

Please describe a problem that you would like to solve using technology and explain how you would solve it (this could be a social problem, a technical problem, a local problem, a world problem, etc.). – required

Response must be between 25-250 words.

What are your current plans for after High School? – required, *but not scored*

Highlight or circle all that apply.

- Two-year college (including community, technical or vocational)
- Four-year college or university
- Planning on going to college sometime in the future - but details are undecided
- Entering the workforce
- Taking time-off / plans for a "Gap Year"
- Joining the Military after High School
- Other

What do you think you will study? – required

Select one.

- Not applicable/Not attending college
- Computing (CS) or Engineering Major or Minor
- Other STEM Major/Minor (excluding computing or engineering)
- Non-STEM Major/Minor or Undecided

What Major do you expect to pursue? – required, *but not scored*

If you did not select “not applicable/not attending college” from the previous question, then please circle or highlight a Major from the list below.

<input type="radio"/> Aerospace Engineering	<input type="radio"/> History
<input type="radio"/> Agriculture and Related Sciences	<input type="radio"/> Informatics
<input type="radio"/> Architecture and Planning	<input type="radio"/> Information Science
<input type="radio"/> Area, Ethnic, Cultural, and Gender Studies	<input type="radio"/> Information Technology
<input type="radio"/> Artificial Intelligence and Robotics	<input type="radio"/> Languages, Literatures, and Linguistics
<input type="radio"/> Arts, Visual and Performing	<input type="radio"/> Law and Legal Studies



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<ul style="list-style-type: none">o Biological and Biomedical Scienceso Biomedical Engineeringo Businesso Chemical Engineeringo Communication and Journalismo Communications Technologieso Computer and Information Scienceso Computer and Information Securityo Computer Forensicso Computer Graphicso Computer Hardware Engineeringo Computer Networking and Telecommunicationso Computer Programmingo Computer Scienceo Computer Software Engineeringo Computer Systems Analysiso Construction Tradeso Database Managemento Educationo Electrical Engineeringo Engineering (other)o Engineering Technologieso English Language and Literatureo Family and Consumer Scienceso Game Design and Developmento Health Professions and Related Clinical Sciences	<ul style="list-style-type: none">o Liberal Arts and Sciences, General Studies, and Humanitieso Library Scienceo Math and Statisticso Mechanic and Repair Technologieso Mechanical Engineeringo Multi/Interdisciplinary Studieso Natural Resources and Conservationo Parks, Recreation, and Fitnesso Personal and Culinary Serviceso Philosophy and Religiono Physical Scienceso Precision Production Tradeso Psychologyo Public Administration and Social Serviceso Science Technologieso Security and Protective Serviceso Social Scienceso System Administrationo Theological Studies and Religious Vocationso Transportation and Materials Movingo Undecidedo Web Developmento Other (if selected, please use the space below to identify your anticipated Major) <hr/>
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4 | Activities

Note that all responses in this section are scored unless otherwise noted.

Please rate your level of involvement in these Curricular, Co-curricular and Extracurricular activities:

Computing classes at your school – required

- None
- Some participation
- A lot of participation

Computing/Technology-Related Community Involvement/Volunteerism – required

- None
- Some participation
- A lot of participation

Computing/Technology-Related Summer or After-School Program (participant) – required

- None
- Some participation
- A lot of participation

Computing/Technology-Related Club or Team (at school or outside of school) – required

- None
- Some participation
- A lot of participation

Independent Study of Computing/Technology to Advance Your Knowledge – required

- None
- Some participation
- A lot of participation

Computing/Technology-Related Job – required

- None
- Some participation
- A lot of participation

Are you now or have you been a member of a national extra-curricular youth program or club, such as – required

- 4H
- AI4All / SAILORS
- American Computer Science League (ACSL)
- BETA
- Big Brothers Big Sisters
- Black Girls Code
- Boys & Girls Club
- BPA (Business Professionals of America)
- BUILTBYGIRLS
- Chick Tech
- Congressional App Challenge
- CyberPatriot
- DECA
- FBLA (Future Business Leaders of America)
- FIRST Robotics
- Girl Scouts
- Girls Go CyberStart
- Girls Who Code
- Google Maker Camp
- Google Science Fair
- HOSA
- IGNITE (Inspiring Girls Now in Technology Evolution)
- ISEF/ISTS (Intel Intl Science & Engineering Fair/Intel Science Talent Search)
- Key Club
- Kode With Klossy
- MESA
- Microsoft Digigirlz
- ModelUN_Model UN
- Mu Alpha Theta / National Math Honor Society
- National Spanish Honor Society
- National Technical Honor Society
- National Girls Collaborative Project (NGCP)
- National Honor Society
- NCWIT AspireIT
- ProjectCSGirls
- Science National Honor Society
- Science Olympiad
- Skills USA
- SWE / SWENext
- TECHNOLOchicas
- Technology Student Association (TSA)
- Technovation Challenge
- VEX Robotics
- None
- Other

Other youth program:

5 | Access to Computing / Technology

Note that all responses in this section are scored unless otherwise noted.

Do you have barriers to accessing technology at home or school?

No internet at home - required

- Applies to me
- Does not apply to me
- I don't know

No access to working computer at home - required

- Applies to me
- Does not apply to me
- I don't know

No computing or technology clubs, teams, or after-school programs offered in my school or community - required

- Applies to me
- Does not apply to me
- I don't know

No broadband (high-speed) internet at home - required

- Applies to me
- Does not apply to me
- I don't know

No computing or technology classes offered at my school - required

- Applies to me
- Does not apply to me
- I don't know

No access to a smartphone - required

- Applies to me
- Does not apply to me
- I don't know

No access to computer (including tablets, chromebooks, etc.) at school - required



- Applies to me
- Does not apply to me
- I don't know

Other barriers (describe)

6 | Additional Information

Note that responses in this section are required, but not scored.

Please complete the following fields.

Is English your first language? - **required**

Please highlight or circle one of the options below.

- Yes
- No
- I don't know

If English is not your first language, what is your first language?

What is the scale your school uses for GPA? - **required**

Please highlight or circle one of the options below.

- 4.0
- 5.0
- 6.0
- Other

What is your GPA? - required
We are collecting GPA for data purposes only, it is not scored.

What is the highest level of school that either parent (or primary guardian) has completed? - **required**

Please highlight or circle one of the options below.

- Primary School
- Some high school but no diploma



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- High School diploma (or GED)
- Some college but no diploma
- Two-year college degree
- Four-year college degree
- Graduate-level degree
- None of the above

7 | Interactive Multimedia

Please complete the following fields.

Note that responses in this section are required, but not scored.

NOTE: These required questions are for research purposes only and are not scored.

Please rate your level of experience with each of these interactive multimedia products:

No experience -- I've never used it.

Some experience -- I've used it a few times, and I only know how to do a couple of things.

A lot of experience -- I use it regularly, and/or I've spent time learning about a lot of the options.

Web Design/Development - required

Dreamweaver, Adobe Creative Suite, etc.

- No experience
- Some experience
- A lot of experience

Computer-Aided Design/3D Printing - required

AutoCAD, Inventor 3D, Cura, Tinkercad, MakerBot, etc.

- No experience
- Some experience
- A lot of experience

Game Development - required

Unity, Visual Studio, Unreal Engine, etc.

- No experience
- Some experience
- A lot of experience

Web Application Development - required

Java, HTML5, PHP, etc.

- No experience
- Some experience
- A lot of experience

Multimedia Design - required

Photoshop, iMovie, Illustrator, etc.

- No experience

- Some experience
- A lot of experience

Game Design - required

GameMaker, Blender, etc.

- No experience
- Some experience
- A lot of experience

Mobile Application Development - required

Objective C, AppInventor, Swift, etc.

- No experience
- Some experience
- A lot of experience

8 | Programming

Please complete the following fields.

Note that responses in this section are required, but not scored.

NOTE: These required questions are for research purposes only and are not scored.

Please rate your level of experience with each of these interactive multimedia products:

No experience -- I've never used it.

Some experience -- I've used it a few times, and I only know how to do a couple of things.

A lot of experience -- I use it regularly, and/or I've spent time learning about a lot of the options.

Mathematical and Statistical Applications - required

Wolfram Mathematica, MATLAB, Scilab, etc.

- No experience
- Some experience
- A lot of experience

Graphics - required

Scratch, Alice, Flash, OpenGL, Java 3d, SNAP, etc.

- No experience
- Some experience
- A lot of experience

Using Advanced Data Structures - required

Stacks, Queues, Trees, etc.

- No experience
- Some experience
- A lot of experience

Open Source Contributions - required

Contributing original code segments to open source libraries like GitHub

- No experience
- Some experience
- A lot of experience

Robotics - required

Labview, ROBOTC, Lego Mindstorms, etc.

- No experience

- o Some experience
- o A lot of experience

In a Coding Language - required

Python, Javascript, C++, C#, PHP, HTML, Visual Basic, etc.

- o No experience
- o Some experience
- o A lot of experience

Database Design/Programming - required

MySQL, MongoDB, Access, SQL Server, etc.

- o No experience
- o Some experience
- o A lot of experience

9 | Hardware/Networking/System Operations

Please complete the following fields.

Note that responses in this section are required, but not scored.

NOTE: These required questions are for research purposes only and are not scored.

Please rate your level of experience with each of these interactive multimedia products:

No experience -- I've never used it.

Some experience -- I've used it a few times, and I only know how to do a couple of things.

A lot of experience -- I use it regularly, and/or I've spent time learning about a lot of the options.

Desktop Support - required

Install/maintain computers for yourself and others, software installation, etc.

- No experience
- Some experience
- A lot of experience

Network Support - required

System manager for multiple machines on LAN or WiFi

- No experience
- Some experience
- A lot of experience

Network Security / CyberSecurity - required

- No experience
- Some experience
- A lot of experience

Server Support - required

System manager for server systems

- No experience
- Some experience
- A lot of experience

Network / System Architecture - required

- No experience
- Some experience
- A lot of experience



Certifications - required

CompTIA, Microsoft, SANS

- No experience
- Some experience
- A lot of experience



10 | Terms & Conditions

AFFIRMATION - required

I do hereby affirm under penalty of complete forfeiture of any and all winnings the following:

1. I have read and understand the rules for participation as set forth in the [Award Information](#).
2. All of the facts stated by me herein are true, correct, and complete to the best of my knowledge and understanding.
3. I meet all of the criteria as specified in the Award Information.
4. NCWIT has permission to upload my application responses as included in this document to my aspirations.org account.

My signature below serves as my confirmation of the above affirmation. - required

Signature - required

Printed First & Last Name - required

Date - required

<<<<END OF APPLICATION>>>>