

Applied Research Laboratories Apprenticeship Program Application Checklist

Graduating high school seniors must meet the following criteria to be considered for the program.

1. Have plans to attend a senior college beginning with the Fall 2024 semester.
2. Have both applied to and been accepted at UT Austin.
3. Have a major within College of Engineering, Geosciences, or Natural Sciences.
(Preference given to students attending UT Austin and whose intended majors are aerospace, electrical, or mechanical engineering; Computer Science; geophysics; mathematics; or physics)
4. Be a US citizen.

If you meet the criteria listed above and are interested in applying, please submit the following:

1. The Apprenticeship Application (this form).
2. A resume
3. An original high school transcript
4. **Optional**—Copies of your SAT and/or ACT scores (if not included on your transcript).

Information about the Apprenticeship Program (IR&D) is located at:

<https://wwwext.arlut.utexas.edu/se.shtml>

Application must be received at Applied Research Labs by March 10, 2024. (Applications received after this date will not be considered.)

The program dates are 6/6/24–8/15/24.

Time off (unpaid) other than listed program dates is only allowed to attend freshman college orientation. You will be expected to work a 40-hour work week, from 8:00am-5:00pm Mon-Fri., throughout each day of the program.

Please send your full Apprenticeship Program application and resume as an email attachment to:

Kimberly Sanders at kimberly.sanders@arlut.utexas.edu

Please **DO NOT** take a photo of your application with your cell phone; if you need to scan your completed application use a mobile app like Scanner Pro.

Please see your high school registrar and have them submit your original transcript. Be sure to allow time for your transcript to be mailed so that it is received in our office by the deadline.

If you choose, you may mail application materials to

Apprenticeship Program HR
Office
Applied Research Laboratories
P.O. Box 9767
Austin, TX 78713-9767

APPLICATION QUESTIONNAIRE

**Applied Research Laboratories
Science and Engineering Apprenticeship
Program Summer 2024
Applied Research Laboratories
The University of Texas at Austin**

Application must be received at ARL by March 10, 2024. Allow time for your transcript to be mailed.

Name:	<input type="text"/>	Date Form Completed:	<input type="text"/>
High School:	<input type="text"/>	Graduation Date:	<input type="text"/>
If you were referred to this program by your teacher or counselor, please list their information here.			
Teacher (full name):	<input type="text"/>		
Counselor (full name):	<input type="text"/>		
Home Address:	<input type="text"/>		
	<small>(Street Address)</small>		
	<input type="text"/>		
	<small>(City)</small>	<small>(State)</small>	<small>(Zip Code)</small>
Daytime Phone:	<input type="text"/>	Evening Phone:	<input type="text"/>
E-Mail Address:	<input type="text"/>		
U.S. Citizen? Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
UT EID:	<input type="text"/>		

*Answer boxes represent the maximum answer length, but may be shorter.
Some of this information should be on your resume.*

1. Have you formally accepted admission to a specific university at this time? If so, which one?

2. What is your intended college major, and why have you chosen this major?

3. List the high school math and science courses you have taken, including those in which you are currently enrolled.

4. List any extracurricular activities in which you are involved.

A large, empty rectangular box with a thin black border, intended for the student to list their extracurricular activities. The box occupies most of the page below the question.

5. Describe any experience with working with or designing electronic or mechanical systems.
Examples include robotics and science fair projects.

6. What is your level of experience in working with computer hardware and/or software?
Please explain.

7. What would you like to gain from a summer internship in science and/or engineering?

8. What are your long-term goals for your career?

9. List any honors or awards you may have received and not listed on your resume (i.e., National Honor Society, merit scholar, science fair competition, music, UIL competition, Scouts, etc.)

10. Artificial intelligence (AI) and machine learning (ML) are changing the way researchers approach technology development. For this question, describe a task that could be completely reimagined with artificial intelligence and machine learning. Outline how you might approach the problem with artificial intelligence. Some considerations might be how the task would be redesigned, what AI/ML algorithms might be applied, what data might be necessary, how you would collect the data, or what pitfalls you might encounter. Your response should be less than 500 words.

10. Additional space below.

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for providing additional space for the answer to question 10.



Human Resources

Employment Application

For non-academic positions less than 20 hours per week or less than 4½ months in length
CC020 · Revised 8/2016

The University of Texas at Austin does not discriminate on any basis prohibited by applicable law including race, color, religion, sex, national origin, disability, age, citizenship status, veteran or disability status in recruitment, employment, promotion, compensation, benefits or training. It is also the university's policy to maintain a work environment free from discrimination on the basis of sexual orientation. The information on the Application, together with any attachments, is the property of the university.

Answer **all** questions completely. Please return completed application to the department to which you are applying.

Mark if currently employed at UT Austin
 Mark if eligible to work in the US

Last name _____ First name _____ Middle initial _____ UT EID _____

Street address _____ City _____ State _____ Zip code _____

Daytime phone _____ Evening phone _____ E-mail address _____ Date available to start work _____ Hours per week available _____

If you are related by kinship or marriage to any current employee or to any member of the Board of Regents of The University of Texas System, provide their name, relationship and department.

If your age is below 18 years, give date of birth _____ If you are a UT Austin student, how many hours are you currently enrolled? _____

Current driver's license type Commercial Operator None

Education General education High School graduate GED Other Highest grade completed _____

School name and location _____

Beginning attendance date (MM/YYYY) _____ End attendance date (MM/YYYY) _____ Major(s) _____

Currently enrolled Graduated Undergraduate hours _____ Graduate hours _____ Completed degree level _____

School name and location _____

Beginning attendance date (MM/YYYY) _____ End attendance date (MM/YYYY) _____ Major(s) _____

Currently enrolled Graduated Undergraduate hours _____ Graduate hours _____ Completed degree level _____

School name and location _____

Beginning attendance date (MM/YYYY) _____ End attendance date (MM/YYYY) _____ Major(s) _____

Currently enrolled Graduated Undergraduate hours _____ Graduate hours _____ Completed degree level _____

Please return completed application to the department to which you are applying.
Human Resources does not need a copy of this form.



Human Resources

Work history

Start with your **first** job and work forward to the **most recent**. You may list both paid and non-paid jobs, such as internships or volunteer work. Include any previous UT Austin work experience here.

Employer _____ Department _____

Street address _____ City _____ State _____ Zip code _____

Title _____ Supervisor's name _____ Supervisor's phone _____

Mark if currently employed with this employer Average number of hours you worked each week _____ Number of employees you supervised, if any _____

Job duties

Reason for leaving _____

Starting salary _____ End salary _____ Begin date _____ End date _____

Employer _____ Department _____

Street address _____ City _____ State _____ Zip code _____

Title _____ Supervisor's name _____ Supervisor's phone _____

Mark if currently employed with this employer Average number of hours you worked each week _____ Number of employees you supervised, if any _____

Job duties

Reason for leaving _____

Starting salary _____ End salary _____ Begin date _____ End date _____

I certify that all the information provided by me in connection with my application, whether on this document or not, is true and complete, and I understand that any misstatement, falsification, or omission of information shall be grounds for refusal to hire or, if hired, termination. I understand any current or former employment at The University of Texas at Austin must be disclosed on my application. I understand that any offer of employment is contingent upon my agreement to abide by the rules and regulations of The Board of Regents of The University of Texas System.

I hereby authorize The University of Texas at Austin or any law enforcement agency to furnish to The University of Texas at Austin my criminal conviction record for a deferred adjudication, misdemeanor or felony offense at age 17 or older. I do hereby release all agents, servants, and employees of UT Austin, the person in charge of such law enforcement agency or department and all members of such law enforcement agency or department from all liability resulting from the furnishing of this information to The University of Texas at Austin.

I authorize The University of Texas at Austin to communicate with persons listed as references, former employers, and any others with whom you desire to check. I agree to hold such persons harmless with respect to any information they may give about me.

Signature of employee

Date



Human Resources

The University of Texas at Austin is required to reach out to, hire, and provide equal opportunity to veterans and individuals with disabilities. To help us measure how well we are doing, we are asking you to provide the following confidential information online at this web address: <https://utdirect.utexas.edu/jobs/confidential.WBX>

- Birthdate, Ethnicity and Race, Gender
- Voluntary Self Identification of Disability
- Federal Veteran Information Invitation to Self-Identify

This information is for reporting purposes only and is not part of the job application. You are not obligated to identify whether you are a person with a disability or whether you are a protected veteran, but we do hope you will choose to provide this information. Your answers will not be used against you in any way.

**APPLIED RESEARCH LABORATORIES
ADDENDUM - SKILLS INVENTORY
STUDENT POSITIONS**

Rev: 1/4/22

Please mark skills that have been acquired through coursework, training, or experience that you would be immediately able to use. While none of these skills are required for employment at ARL, please mark the skills you possess.

<p>LANGUAGES:</p> <input type="checkbox"/> ADA <input type="checkbox"/> Bash <input type="checkbox"/> C <input type="checkbox"/> C++ <input type="checkbox"/> Fortran <input type="checkbox"/> Java <input type="checkbox"/> Objective-C <input type="checkbox"/> Pascal <input type="checkbox"/> Perl <input type="checkbox"/> Python <input type="checkbox"/> Ruby <input type="checkbox"/> Tcl/Tk <input type="checkbox"/> Verilog <input type="checkbox"/> VHDL <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>	<p>SOFTWARE PACKAGES:</p> <input type="checkbox"/> LabView <input type="checkbox"/> Lab Windows <input type="checkbox"/> MathCAD <input type="checkbox"/> Matlab <input type="checkbox"/> Mathematica <input type="checkbox"/> OrCAD <input type="checkbox"/> PADS <input type="checkbox"/> Pro/Engineer <input type="checkbox"/> SolidWorks	<p>ENGINEERING:</p> <input type="checkbox"/> Drafting <input type="checkbox"/> Dynamics <input type="checkbox"/> Electronics packaging <input type="checkbox"/> Finite element modeling <input type="checkbox"/> Fluid mechanics <input type="checkbox"/> Heat transfer <input type="checkbox"/> Machine Shop <input type="checkbox"/> Materials science <input type="checkbox"/> Mechanics <input type="checkbox"/> Operations <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>																		
<p>LIBRARIES:</p> <input type="checkbox"/> X11/Motif <input type="checkbox"/> Java/Swing <input type="checkbox"/> MFC <input type="checkbox"/> MPI <input type="checkbox"/> PVM <input type="checkbox"/> IDL <input type="checkbox"/> OpenGL <input type="checkbox"/> Java3D <input type="checkbox"/> SQL <input type="checkbox"/> ODBC <input type="checkbox"/> JDBC <input type="checkbox"/> CORBA <input type="checkbox"/> Java RMI <input type="checkbox"/> RPC <input type="checkbox"/> Obj Orien DBs: <input style="width:150px;" type="text"/> <input type="checkbox"/> iOS <input type="checkbox"/> Android <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>	<p>OPERATING SYSTEMS:</p> <table style="width:100%; border: none;"> <tr> <td></td> <td align="center">Familiar with:</td> <td align="center">Developer on:</td> </tr> <tr> <td>MAC</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>UNIX</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>LINUX</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>Windows</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>Other:</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table> <input style="width:150px;" type="text"/>		Familiar with:	Developer on:	MAC	<input type="checkbox"/>	<input type="checkbox"/>	UNIX	<input type="checkbox"/>	<input type="checkbox"/>	LINUX	<input type="checkbox"/>	<input type="checkbox"/>	Windows	<input type="checkbox"/>	<input type="checkbox"/>	Other:	<input type="checkbox"/>	<input type="checkbox"/>	<p>OFFICE AUTOMATION:</p> <input type="checkbox"/> Access <input type="checkbox"/> Drawing Prog: <input style="width:150px;" type="text"/> <input type="checkbox"/> Filemaker Pro <input type="checkbox"/> Framemaker <input type="checkbox"/> MS Access <input type="checkbox"/> MS Excel <input type="checkbox"/> MS Outlook <input type="checkbox"/> MS Powerpoint <input type="checkbox"/> MS Publisher <input type="checkbox"/> MS Visio <input type="checkbox"/> MS Word <input type="checkbox"/> Open Office <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>
	Familiar with:	Developer on:																		
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UNIX	<input type="checkbox"/>	<input type="checkbox"/>																		
LINUX	<input type="checkbox"/>	<input type="checkbox"/>																		
Windows	<input type="checkbox"/>	<input type="checkbox"/>																		
Other:	<input type="checkbox"/>	<input type="checkbox"/>																		
<p>WEB:</p> <input type="checkbox"/> CSS <input type="checkbox"/> HTML <input type="checkbox"/> XML <input type="checkbox"/> Javascript <input type="checkbox"/> iQuery <input type="checkbox"/> JSP <input type="checkbox"/> PHP <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>	<p>ELECTRONICS:</p> <input type="checkbox"/> Analog <input type="checkbox"/> Cable Construction <input type="checkbox"/> Computer Assembly <input type="checkbox"/> CPLD/FPGA <input type="checkbox"/> Digital <input type="checkbox"/> Microcontrollers <input type="checkbox"/> Op Amp Circuits <input type="checkbox"/> PCB Layout <input type="checkbox"/> Power Supply Design <input type="checkbox"/> Radio <input type="checkbox"/> Test Equipment <input type="checkbox"/> Manual Soldering	<p>WRITING/EDITING:</p> <input type="checkbox"/> Publication Record (attach) <input type="checkbox"/> Tech/Engr or Scientific <input type="checkbox"/> Presentations <input type="checkbox"/> Software Documentation <input type="checkbox"/> System Documentation <input type="checkbox"/> Other: <input style="width:150px;" type="text"/>																		

I certify that the above information is correct. I understand that any false statements made herein will void my Application and any actions based on it.

By typing in the signature below, this represents the applicants official signature on this form.

SIGNATURE OF APPLICANT : DATE: