Robotic Autonomy
Carnegie Mellon University
Application Form

Personal Details

Name

__________________________________________________________

Last    First       Middle Initial

Email address

______________________________________________

Address

________________________________________________________________________
Street Address

________________________________________________________________________
City, State and Zip Code

Date Of Birth    __________

Home Tel No      __________

Current High School Class    __________    High School GPA    _____

High School Details

Name

______________________________________________

Address

________________________________________________________________________
Street Address

________________________________________________________________________
City, State and Zip Code
Please answer each the following questions. Type your answers, print them out and attach them to this application form when mailing your application materials to Carnegie Mellon University. Questions 1 and 4 are short answer - one paragraph or less. Questions 2 and 3 can be longer as indicated.

1. How do you believe you will benefit from this summer course?

2. Design a robotics project that you would undertake after graduating from Robotic Autonomy. Remember, you will be keeping the home Rover robot that you construct and program in this course, so this Rover may have a role in your project. Describe your robotics project, but do not exceed 2 pages, including text and figures or illustrations.

3. Describe in detail any previous experience you have had in programming, building or using robots or other electro-mechanical systems. Prior experience is of great value for this course, so be complete. Do not exceed 1 page of text.

4. This course is intended for students who are comfortable programmers. Describe your programming experience, identifying courses at high school or elsewhere in which you have developed your programming experience. If you believe you have programmer mastery, but this is not evident from your transcript, then describe your extra-curricular programming experiences, including languages and operating systems with which you are familiar.

5. The following is a simple programming problem in C that will help us verify your knowledge of programming. The function fibonacci(n) is intended to print out the first n values of the Fibonacci Sequence. For instance, calling fibonacci(4) ought to result in the following output:

```
>fibonacci(4)
1,1,2,3
>
```

The code as given below has several bugs. Describe the required corrections.

```c
/* prints out the first n fibonacci numbers */
void fibonacci (int n)
{
    if (n == 0) return;
    printf("\n1");
    if (n == 1) return;
    printf("1");
    fiborecurse(1,1,n-2);
    printf("\n");
}

/* helper function for fibonacci */
void fiborecurse (int n1,int n2,int n)
{
    int n3=n1+n2;
    if(n==0) return;
    else {
        fiborecurse(n1,n2,n);
        printf("%d", n3);
    }
}
```
Reminder

Send this application form via snail mail to the address provided on the Robotic Autonomy web site along with the following additional documents:

- Complete answers to questions 1 – 5 above
- An official High School transcript
- A check for the amount of $20, payable to Carnegie Mellon University

Also, remember to check with your teacher recommender to verify that he or she has sent us a completed recommendation form before the deadline.