



Job opening:
Temporary Researcher
October 4th, 2021

The *Advanced Learning, Artificial Intelligence and Control* group is offering an interesting job opportunity starting during the Fall 2021 in collaboration with *Diatech Diabetes* (<https://diatechdiabetes.com/>), a medical device company developing a smart insulin infusion set failure detection system for people with Type 1 Diabetes using pumps. We are inviting applications for a **Temporary Researcher** position.

As a Temporary Researcher for Diatech Diabetes, you will work part-time in supporting an NIH-NIDDK grant funded project where you will be developing tools for reading and analyzing continuous glucose monitor (CGM) data. You will work closely with and be supported by Dr. Marzia Cescon on understanding your project endpoints and requirements but will have autonomy in execution. This paid, part-time position is expected to start between October 18th and November 1st and last between 6-9 months. It is targeted for currently skilled individuals looking for additional experience with biomedical programming, data science, and working within both the resource limitations and creative freedoms typical of a startup.

Your projects will include:

- **Development of the following, with documentation:**
 - **Data monitoring tool for reading and saving concurrent CGM data from multiple consumer medical devices in use.**
 - **Dashboards for viewing CGM trends that also highlight select features of interest for the research team.**
- **Assisting in publication of results.**

Preferred Qualifications and Attributes

- Strong motivation to learn new things.
- Achievement, or seeking upperclassman, of an undergraduate degree in either computer science, computer/electrical engineering, biostatistics/informatics, or related field where scientific computation is a core focus.
- Working proficiency in English with a high degree of comfort in asking for clarification and help whenever needed.

- Demonstrated capabilities for executing programming or research projects with documentation.
- High degree of comfort with Python and popular libraries for data science such as (but not limited to):
 - Numpy/Pandas/scikit-learn for analysis.
 - Flash or Django for custom dashboards.
- High degree of comfort with common data engineering tasks, such as
 - Work with common data formats such as CSV and JSON.
 - File I/O operations.
 - Data wrangling and cleaning.
- Familiarity with productivity and communication tools such as Slack and Google Suite (Docs, Calendar, etc.)

Appreciated Qualifications and Attributes

These are not required, but we would be especially excited about candidates that have one or more of the following:

- Graduate degree or equivalent experience in a field where scientific computation is a core skill.
- Practical or lived experience with type 1 diabetes.
- Experience producing code for private industry.
- Experience with creation or management of either relational or non-relational databases.
- Demonstrated ability to execute a vision or work with others in a personal or creative hobby or project.
- Familiarity with creative and presentation tools such as Adobe Suite, Microsoft PowerPoint. etc.
- Availability for travel to conferences for presenting work.

Position Details

- \$3636 USD total compensation.

Expected typical activities in a work week:

- Availability for recurring meetings of 1-2 hours in length with Dr. Cescon
- Making and keeping an organized calendar of project milestones with weekly milestones.
- Depending on the current project phase, either literature reviewing/researching or coding for upcoming milestones.
- Responding to or reaching out Diatech leadership through Slack or email.

To inquire about the listed position, please send an introductory email along with a resumé attachment to:

Dr. Marzia Cescon: mcescon2@uh.edu