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## **Abdul Fattah MOHAMAD HADI**

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Dear Madame/Sir:

As a user of GATE, I received your letter concerning the postdoctoral position at CRCNA and I am interested in this position. Actually I am in the last year of my PhD in nuclear physics at SUBATECH laboratory - Ecole des Mines de Nantes/France and I plan to finish my thesis at the end of this year.

In my PhD, I am developing a simulation with GATE of a  $3\gamma$  imaging system XEMIS. The key idea of such system is to use a  $\beta+\gamma$  emitter (the  $^{44}\text{Sc}$ ), so a  $3\gamma$  imaging camera is composed of PET camera and a TPC (Time Projection Chamber) detector. For this development I have added a lot of modules, which contains a lot of C++ classes, namespaces ... to GATE to make it capable to simulate a TPC detector and  $3\gamma$  camera. For analyzing my results I am using macros of ROOT. We are using ROOT too to reconstruct the final images. As our team is a member of the OpenGATE collaboration, so I have contributions in GATE development.

After obtaining my license in physics, I was attracted by medical physics, so I did my second year master in that field. In this master I learned the physics of medical imaging systems and several other courses (in mathematics, chemistry, biology and computer) related to the same field.

Enclosed is my resume to provide additional information about my undergraduate and graduate work. I look forward to hearing from you. Thank you for your time and consideration.

Sincerely,

Abdul Fattah MOHAMAD HADI  
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Enclosure

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