Cody Jordan

CONTACT INFO

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RESEARCH INTERESTS

I am a physicist with a background in numerical methods pursuing quantum computing and quantum information. My main passion is having an interdisciplinary approach to research, and being able to communicate technical concepts in novel ways.

EDUCATION

BSc. Scientific Computing   2009-2014

Florida State University

> Minor in Computer Science. I learned numerical methods and data analysis techniques as part of an inderdisciplinary program at FSU. My capstone project was learning and implementing a 2D finite element method simulation.

BSc. Physics   2016-Present

University of Central Florida

> Currently enrolled. 3.47 GPA. I returned to university as a pathway to quantum computing and quantum information research, with a goal of continuing to a PhD program. UCF has allowed me to add a solid physics background and range of experimental skills to my existing technical knowledge.

WORK EXPERIENCE

Software Developer   2015-2016

Bucher-Emhart Glass

> Developed code for industrial glass machines. I managed local IT concerns, a test-case database, continuous integration, and worked alongside a team of senior developers as a programmer.

Learning Assistant   2017

University of Central Florida

> At university I work part-time as a Learning Assistant, part of a Physics Department sponsored program which has upper-division students act as tutors and directly engage in the classroom.

SKILLS AND MEMBERSHIPS

Languages	C#, C++, Python
Software	MATLAB, LaTeX, MongoDB, Visual Studio, Git/Subversion, LabView
General	Electronics including Arduino, Basic Plumbing, Eagle Scout, Lab equipment including vacuum chambers and lasers
Society	APS
Technical	Linux and BASH, Unit Testing, Continuous Integration
Recreational	Fire Juggling

ACCOMPLISHMENTS

Creating Course Material

UCF Learning Assistant

As a Learning Assistant at UCF I help develop a portion of our numerical computing curriculum. I enjoy this quite a bit as it gives me an opportunity to engage with a subject I'm passionate about and hone my skills as an educator and communicator.

Workshops and Cavendish Experiment

SPS

I recieved the SPS Leadership Award, and have continued to engage with SPS activities. Our chapter is conducting the Cavendish experiment, and I have hosted a workshop on "Real World Data Collection with Python and Arduino."

Lab Work

UCF Physics Student

I have started work in a lab which uses ultrahigh vacuum and XUV pump-probe techniques to examine surface properties of photo-catalysts. So far I have learned essentially lab procedures and assisted with constructing a time-of-flight spectrometer.

Outreach

UCF Physics Student

Through the physics department I volunteer for our career day. This outreach gives me a chance to see people from diverse technical and social backgrounds, and give pre-University students a window in to physics. Additionally I engage new students in our department by hosting our SPS Jeopardy contest each semester.

Finite Element Method

FSU Scientific Computing

I programmed a two dimensional finite element method simulation for solving non-analytic PDEs using quadratic approximations in C++. This program was one of the largest which I made as part of a capstone class at FSU and represents a culmination of my skills in numerical computing and advanced mathematics.

Test Database

Bucher-Emhart Glass

When I was first hired at Bucher-Emhart Glass there was a database of test images that was not backed up and not organized. I created a reliable back up scheme, reorganized our MongoDB database, and worked closely with my co-workers to leverage this as an automated test suite for new software releases. Hands-on database and work-flow experience is important to me and I feel much more confident working with big data and critical systems.

IT

Bucher-Emhart Glass

At work I set up workstations for newly hired developers and maintained both new releases and old versions of our software in our training room. Additionally I worked with my boss

to create professionally presented documents and reports. These IT and administrative skills prepare me to work in environments where accountability and professionalism are key.

Independent Learning

Coursera, Textbooks

I engage in online classes through Coursera and have particularly enjoyed Quantum Computing and a course on Cryptography. In particular studying abstract algebra has been very enlightening and contributes to my understanding of physics.