Dear CSE Students:

Welcome to the first newsletter of the new year.

**News from the Undergraduate Program:** Welcome Back! Dr. Kouri’s office hours for Spring 2013 are Monday/Wednesday 1pm to 2:30pm and Tuesday/Thursday 11am to 12:30pm.

**News from the Graduate Program:** Happy New Year and Welcome Back! For those of you planning to defend in 2013, please check your email from Catherine Burton for the deadline information. If you didn’t get it, please let me know. Please check the CSE Calendar of Events on a regular basis for deadlines and events. I would also like to remind those of you planning to take the Qualifiers this semester that the deadline to sign up is Friday, January 11, 2013. Please bring your sign-up sheet to my office by that date.

Attached are announcements for the following (please note that this listing does **not** imply University or Department endorsement in any way):

- Postdoctoral Fellow – Imaging (Moffitt)
- Math Assistants Needed for Learning Center
- MobileTec Trainee Applications Programmer (GIS)
- MobileTec Trainee Applications Programmer
- APPLIED DEFENSE SOLUTIONS Associate Software Engineer (#0210a)
- Mindtree Hiring USF Future Grads

Regards,

Ken Christensen
Director of the Undergraduate Program (and Newsletter Editor)
Email: christen@csee.usf.edu

The archive of old newsletters can be found at http://www.csee.usf.edu/newsletter
Postdoctoral Fellow – Imaging

We are seeking a highly motivated Postdoctoral Fellow to work under Dr. Ariosto Silva to create pharmacokinetic computational models of cancer targeted imaging and therapeutic agent distribution in vivo. The successful candidate will work in collaboration with wet lab researchers to ensure that the computational models actually faithfully represent the experimental conditions and results.

There will be an initial period of on-the-job training on the different techniques currently used to image and quantify the affinity of these ligands in vitro and in vivo, so the candidate fully understands the under-lying dynamics of the interactions behind the experimental results, as well as the limitations of the imaging instrumentation and techniques. These experiments will include but are not restricted to: culture of mammalian cells expressing specific surface markers, in vitro characterization of ligand-receptor interactions (binding affinity, saturation, etc.), engraftment/ injection of tumor cells into mice to establish animal models of cancer, non-invasive imaging of tumors, injection and monitoring of distribution and clearance of targeted imaging agents (fluorescent/radioactive, etc.).

Emphasis will be on quantitative measurements or quantitative interpretations from qualitative data, when direct measurements are not possible. The candidate will be expected to interpret the experimental data and port them into an existing model of in vivo pharmacokinetics, perform the simulations, statistical analysis, document the results and help write manuscripts in collaboration with other members of the research group.

A Doctorate (M.D. and/or Ph.D.) degree is required. Excellent verbal and written communication skills are required. Advanced computational mathematics (Java or Matlab), and extensive knowledge of pharmacokinetics, equilibrium of chemical reactions, and Michaelis-Menten dynamics are required. Wet lab experience (in vitro or in vivo) is a plus, but not a requirement.

Please apply online at www.moffitt.org/careers to REQ ID 9804 and make sure to attach a CV, cover letter, and the names and contact information for three references.
Math Assistants Needed for Learning Center

From: Daksha Jadeja [mailto:dakshajadeja@ikumon.com]
Sent: Friday, January 04, 2013 1:21 PM
Subject: Hello and Math Assistants

I run a learning center for students of ages 4 thru 18. As a result, I frequently recruit USF students.

I am currently looking to hire Math Assistants who are strong in Math concepts such as Algebra I & II, Pre-Calc/Calc, and who are interested in working part time, two to three afternoons a week.

I was wondering if you would be kind enough to circulate this posting to your students and post on the bulletin board. Interested candidates may email me at dakshajadeja@ikumon with their resume.

Please let me know if you should need any more information.

Thank you so much for your assistance - I really appreciate it!

Best Regards,
Daksha

Daksha Jadeja
Center Director
Kumon of Lutz - Land O' Lakes/Wesley Chapel North
Tel : 813-909-9122
Tel : 813-973-2266
POSITION TITLE: Trainee Applications Programmer (GIS)

POSITION DESCRIPTION:

Basic Function: Responsible for GIS based product module development and general support to the development team related to GIS plus GIS data analysis and development / creation.

Responsibilities:
1. The supplemental enhancement of the existing GIS application product modules according to guidelines including adherence to all associated policies and procedures (e.g. regarding coding practices, source control etc.).
2. Assist in GIS data projects if needed – building new layers, new fields within existing layers, integrating imagery data and so on.
3. Provide support to the Development team with regards to any GIS aspects, configuration, R&D and so on as necessary.
4. At all times all activities should adhere to all associated policies / procedures (e.g. development / technical standards, source control etc.).

Technical Skills:
1. Experience in the ESRI suite of products (ArcGIS Desktop, Server etc.).
2. Some experience with SQL Database (or Access) operation and design.
3. Any qualifications/experience with programming and/or database concepts / design / access a bonus.

Performance Skills:
1. Good oral and written communication, motivation and problem solving skills.
2. Team Work, and be able to work under minimal supervision.
4. Interpersonal and customer relations. Show Professional attitude at all times.

Education and Qualifications:
1. High School Diploma or equivalent, and minimum of 1 year experience in IS/MIS. or
2. Bachelors Degree in Computer Science or related field.
POSITION TITLE: Trainee Applications Programmer (GIS)

POSITION WORK EXAMPLES:

Overview: Tasks will vary based on current needs but the goal is to provide real-world experience through individual R&D tasks / projects to evaluate ArcGIS 10.1 components and capabilities, supplemental GIS based application product development, GIS data manipulation and so on that will also be of benefit to the company. MobileTec has limited expertise in GIS so is looking to supplement and build up expertise in this area.

Potential Projects:
1. Evaluation of ArcGIS Online with regards to the data available, the ability to manipulate and add to that data, consume it and so on
2. Evaluation of ArcGIS / Esri Maps for Sharepoint 2010 / 2013 – perform R&D in to the capabilities of this, the requirements for implementation and more
3. Evaluation of ArcGIS / Esri Maps for Office 2010 – perform R&D in to the capabilities of this, the requirements for implementation and more
4. Creation of hot-spot maps / heat maps and other visualization components through geo-coding and displaying address data
5. Work with the SDK to evaluate complexity of creating stand-alone deployable mapping components
6. Evaluate additional Esri products (e.g. Tracking Analyst) with a view toward how they would benefit ‘crime analysis’
POSITION TITLE: Trainee Applications Programmer

POSITION DESCRIPTION:

Basic Function: Responsible for supplemental product development (BI reports, self-standing functions, etc.) and general support to the development team including individual R&D tasks / projects, data migration and more.

Responsibilities:
1. The supplemental enhancement of the existing application product modules according to guidelines including adherence to all associated policies and procedures (e.g. regarding coding practices, source control etc.).
2. Assist in data conversion projects if needed – export data from legacy MobileTec applications to text files and writing / modifying SQL stored procedures to import this data into the MobileTec products’ new SQL database in such a way so that all the application data can be viewed logically by the appropriate new MobileTec application.
3. Provide support to the Development team with regards to any necessary installation, configuration, R&D and so on as necessary.
4. At all times all activities should adhere to all associated policies / procedures (e.g. development / technical standards, source control etc.).

Technical Skills:
1. Some experience in GUI .NET Programming (WPF, XAML or Android, iOS etc.) including some knowledge of current industry methodologies (MVVM etc.).
2. Some experience with SQL Database operation (stored procedures etc.) and design (normalization rules, cube structure, spatial data etc.).
4. Any qualifications/experience with communications and networking a bonus.
5. Any qualifications/experience with database concepts/design/access a bonus.

Performance Skills:
1. Good oral and written communication, motivation and problem solving skills.
2. Team Work, and be able to work under minimal supervision.
4. Interpersonal and customer relations. Show Professional attitude at all times.

Education and Qualifications:
1. High School Diploma or equivalent, and minimum of 1 year experience in IS/MIS. or
2. Bachelors Degree in Computer Science or related field.
POSITION TITLE:  Trainee Applications Programmer

POSITION WORK EXAMPLES:

Overview:  Tasks will vary based on current needs but the goal is to provide real-world experience through supplemental product development, individual R&D tasks / projects, data migration and so on that will also be of benefit to the company.

Potential Projects:
1. Business Intelligence through SQL Reporting Services and Analysis Services – R&D needed in to the capabilities offered through SQL Reporting Services and the associated development of cube data structures. This project could grow in to requirements gathering for actual product development and implementation of those requirements
   a. This could be a single project, team project or split in to multiple parts depending on the capabilities of the individual(s)
2. Sharepoint 2010 / 2013 – several projects including R&D in to Performance Point, Workflow management and general site / web-part development. Also R&D in to Sharepoint as a data delivery mechanism for the SQL Reporting Services as mentioned above
3. Extended Microsoft Office 2010 integration in to commercial applications – Excel, Visio and Lync (plus Outlook to a degree) all offer integration and extension in to Sharepoint for example plus can be customized as-is through add-ins to provide specific additional features
4. Mobile device R&D – there are a wide variety of devices running a number of operating systems in a number of screen resolutions. MobileTec already has mobile s/w designed for laptops / tablets running Windows and is looking to extend this in to other operating systems and other devices
5. Creation of R&D projects based off third-party components to evaluate their capabilities
6. Reporting tool evaluation and report creation
7. Database design and data migration – there are several projects needed requiring database expertise from data migration from our old applications to new SQL databases to design of de-normalized reporting databases
8. Other application development, prototyping as needed
Associate Software Engineer (#0210a)

ABOUT APPLIED DEFENSE SOLUTIONS:
Applied Defense Solutions, Inc. (ADS) is a highly-specialized Technical Services and Solutions company that applies our operational experience and development knowledge to provide unique subject matter expertise and to build highly effective mission critical systems for its' customers. Headquartered in Columbia Maryland, with offices in Virginia, Colorado and Pennsylvania, ADS addresses the space systems, national security space, geospatial information systems, and modeling & simulation markets for the Department of Defense, Intelligence Community, Civil Space, and the Commercial Space Industry. ADS has on-going work spanning the full project life cycle from mission concept studies, research & development, system development & integration, mission planning, and mission operations across multiple satellite orbit regimes (LEO, HEO, GEO, lunar, and interplanetary).

During the 8-year history of our small company, our highly technical staff has operational experience flying more than 20 satellites including past and future NASA science missions (IBEX, LCROSS, LADEE, Edison), military communications satellites, and commercial imagery satellites. The partnership and collaboration among the ADS staff possessing a broad range of skills and a diverse set of background experiences make the ADS team a dynamic and exciting place to work.

Don’t miss your chance to be a part of the innovative ADS Team - directly involved in current and future missions supporting NASA, the US Navy, the Air Force, and the Intelligence Community. We offer a competitive salary, comprehensive benefit package, interesting projects and challenges, and opportunities for career growth and leadership.

Applied Defense Solutions currently has an opening for an Associate Software Engineer at its Virginia location.

KEY ROLE:
The successful candidate will provide technical expertise as a member of a dynamic software engineering team developing cutting edge analysis and decision support tools. Interested parties should expect to provide support for ongoing J2EE development projects, to be responsible for developing astrodynamics-based solutions using Agile/Scrum software development methodologies.

REQUIRED SKILLS:
- 2+ years of experience with Java development, including J2EE technologies
- Experience developing software using Agile/Scrum methodology
- Integration experience with COTS, GOTS, and Open Source software
- B.S. degree in Computer Science or related field
- Active TS/SCI security clearance

DESIRED SKILLS:
- Experience with C/ C++, .NET development, Matlab
- Experience with Satellite Toolkit (STK) or other astrodynamics tools
- Experience with modern web client technologies (HTML5, WebGL)
- Experience with web service, SOA, and distributed computing standards
- Source code and configuration management systems
- Technical writing & documentation

Submit resume and salary requirements to Jobs@AppliedDefense.com. Reference Job #0210a. No phone calls please.

Applied Defense Solutions is an equal opportunity employer.
Mindtree is a global information technology solutions company with revenues of over USD 400 million. Our 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish.

As Mindtree continues its rapid US expansion – we have over 800 Mindtree Minds in the US working in 36 states – we seek highly driven and talented entry-level Java programmers, .NET Programmers and QA Testers who can help us keep pace with the increasing demands of the market.

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- Design modules & programs
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YOU CAN EXPECT...
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Contribute, Innovate and see your projects to Fruition at Mindtree!

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Mindtree United States Delivery Center - Gainesville, FL

Mindtree is a global information technology solutions company with revenues of over $400 million. Our 11,000 experts engineer meaningful technology solutions to help businesses and societies flourish. The Mindtree United States Delivery Center (USDC) in Gainesville, Florida is officially open for business with over 60 Minds in-house. We are happy to represent the next generation delivery center for the organization and look forward to fulfilling all of the goals and dreams from which the USDC was conceptualized.

As Mindtree continues its rapid US expansion – we have over 800 Mindtree Minds in the US working in 36 states – we seek highly driven and talented entry-level Java programmers, .NET Programmers and QA Testers who will be expertly trained and can help us keep pace with the increasing demands of the market.

Training Fresh Minds
At the USDC, we have a multi-layered approach to training, providing a well-rounded experience for Minds at all levels. Fresh minds go through technical training for Java or .Net as well as Scrum training sprints and shadow sprints. Expert instructors and guest speakers, including Minds from other offices and local company heads, provide additional levels of training in a variety of areas from leadership to technical and industry nuances. We also have weekly USDC open house tech talks, where all Minds gather, interact and learn, that cover socially impactful topics to help our Minds better understand industry, client, country and world challenges.

Reaching Budding Minds
The USDC has established an internship program and an ambassador program to tap students during their college years. We are educating students on the fact that a computer science degree doesn’t have to only mean a career in tech support. A lot of smart kids like you, good at math and logic, are unaware of the high quality technology career paths available to them in the US. Jobs in app development, where comp sci grads can be creative and forward thinking from project concept to execution, are available inside of corporations. Between these efforts, recruitment events and job fairs, we are both educating students that there is a solid career path to leverage their skills and identifying the next generation of Mindtree employees while promoting Mindtree on campuses.

We look forward to the opportunity to let you know of all the endless possibilities that Mindtree holds.
Welcome to possible.

Testimonials:
Tara Parkins, a fresh Mindtree Mind and campus hire from UF, raves about Mindtree and the difference that she’s seen here. “I am not just a body in front of a computer. My thoughts, feelings, and voice have all been heard, and I have been able to express myself through many mediums. Having such a direct impact on our company and community is tremendously rewarding, and our management team is so accessible and involved that I couldn’t be more inspired at this moment.”

Manuel “Manny” Montes de Oca, a fresh Mindtree Mind and campus hire from Florida State, is nearing the end of intensive Java training. “It’s been a lot of information in a very fast paced environment but very positive. We want to learn. We’re not being forced to learn, we want to learn. We’re going through years’ worth of Java knowledge in weeks and I’m really enjoying it.”