

You are receiving this email because you are enrolled in the MSIS/MST graduate degree programs within the Department of Informatics and Networked Systems at the School of Computing and Information. Each weekly newsletter will feature important updates on career/academic and job opportunities, department and school events, enrollment guidance and upcoming academic deadlines.



Available in-Person in IS Building Room 521 on Tuesdays from 11am to 12pm and Thursdays from 1pm to 2pm Available virtually every Wednesday from 4pm to 5pm- https://pitt.zoom.us/j/96524201536

# Writing Center

Please be advised that the Writing Center will be offering hours to provide additional support for our graduate students.

The Writing Center assists all Pitt students in their writing efforts. It is staffed by experienced consultants who have been trained to help others improve their writing.

You can find additional information below:

**Tutor:** Eleni Anastasiou Days/times:

- Friday, 10:30 am -12:30 pm
- Saturday 1:30 pm to 4:30 pm.

Students can access the "Fall 2241 Information Science ONLY" schedule

here: https://pitt.mywconline.com/schedule2.php?scheduleid=sc64f9d1c298366

You will have to register for English Center's Online scheduler, WCOnline, to make an appointment.

Did you know SCI has a Resume Database?

The resume database is a great tool for students to post their resumes for companies the school works with to search for candidates for positions they are looking to fill.

This resume book is for SCI students and corporate partners only. *Please note:* once a resume is submitted, you will not have the opportunity to change it. *Please submit one resume per semester.* You may choose to have your resume included in the school-wide database along with individual student organization database. Please find additional details here: Resume Book (pitt.edu)

DINS PhD Student Speaker Series

Thursday, September 28 at 11:00 a.m. to 12:00 p.m.

130 North Bellefield Ave., 538/539 Conference Room

# DINS PhD Speaker Series: Lesong Jia & Shihong Ling

The DINS PhD Student Speaker Series, an ongoing series of presentations by DINS PhD students, explores the next generation of scholarship about networks, information, and human behavior.

"Predictive Models for Driver Situational Awareness of Objects in Conditionally Automated Driving" Lesong Jia

Abstract: Modeling a driver's situational awareness (SA) is critical to enhancing the driving safety and efficiency of the takeover process in conditionally automated driving. This study developed machine learning models to predict drivers' object-specific SA during takeover process, using features including traffic density, object properties, driver demographics, and physiological data. The dataset, including 168 takeover event data from 28 participants, was collected through a driving simulator experiment, where each participant experienced 6 challenging takeover scenarios with varying traffic densities and surrounding vehicle configurations. To construct our model, we first pre-processed raw physiological data and extracted and selected 26 key features according to feature importance and inter-correlation. Next, we applied cross-validation to train and evaluate various models, time windows, and hyperparameters using iterative grid search. We primarily used macro F1 score for evaluation, considering the dataset imbalance. The best model performance was achieved with the Support Vector Machines model, obtaining a macro F1 score of 0.75, a recall score of 0.77, and a macro recall score of 0.77 with a 1-second pre-takeover and 3-second post-takeover time window. Our modeling work could contribute to the development of driver monitoring and takeover support systems in conditionally automated vehicles.

"Improving Explainable Object-induced Model through Uncertainty for Automated Vehicles" *Shihong Ling* 

<u>Abstract</u>: The advancements in artificial intelligence have enhanced the capabilities of automated vehicles (AVs). However, there still exist challenges related to the transparency of their systems, which can lead to potential user misconceptions. While previous studies have produced explanations

for driving, our research emphasizes the integration of uncertainties associated with actions. By utilizing the BDD-OIA dataset, we introduced a reweighting strategy driven by uncertainties, optimized a model induced by objects, and improved the interpretability of complex driving situations. Our approach, which incorporates the evidential deep learning method (EDL), demonstrated significantly enhanced performance compared to conventional methods. We will focus our future efforts on developing adaptable explanations to enhance user trust in AVs.

You can find additional information here: <u>DINS PhD Speaker Series</u>: <u>Lesong Jia & Shihong Ling - University of Pittsburgh</u>

\_



Friday, October 6<sup>th</sup> through Sunday, October 8<sup>th</sup> Information Sciences Building, 3<sup>rd</sup> Floor 135 North Bellefield Avenue, Pittsburgh, PA, 15260



Spend a weekend designing and creating a game with a positive social impact — with a chance to win cool prizes! Games4SocialImpact is open to ANY university student 18 years of age or older. No programming background is necessary.

Learn More & Register at <a href="https://www.games4socialimpact.pitt.edu">https://www.games4socialimpact.pitt.edu</a>

# Schedule

Friday, October 6: 6PM – 9PM
Orientation, Team Registration &
Keynote
Saturday, October 7, 9 AM through
Sunday October 8, 12 PM
Game Jam
Sunday, October 8: 12PM – 4PM
Judges and Jammers Evaluate Games
Sunday, October 8: 4PM – 6PM
Awards Ceremony

# 2024 Intern - Software Engineer

# **Adobe Systems**

On-site · San Jose, CA and 5 more

#### What You'll Do

- Develop high-performance, reliable, testable and maintainable code.
- Participating in all aspects of software development activities, including design, coding, code review, testing, bug fixing, and code/API documentation.
- Collaborate with engineers and participate in daily or weekly stand ups and meetings.
- Grow with the support of your team and help others on the team grow by providing thoughtful feedback and uplifting those around you.
- Work both independently and collaboratively within a fast-paced development team, with clear, positive, and constructive communication.
- Additional responsibilities as needed based on specific role or team.

2024 Intern - Software Engineer | Adobe Systems | Handshake (joinhandshake.com)

# Senior R&D Engineer (Materials) - Hybrid

### <u>Ansys</u>

On-site •

Canonsburg, PA

# Role Description

#### **SUMMARY**

The Senior R&D Engineer participates in the design and development of software products and supporting systems. In this role, he/she will use expertise to develop strategic plans and requirements in achieving development objectives. The Senior R&D Engineer will work with a software development team on advanced material constitutive and damage models and related developments in a solid mechanical finite element solver (Ansys MAPDL).

#### RESPONSIBILITIES

Participates in researching, designing, planning and implementing advanced material constitutive models in Ansys MAPDL and related products. Works on material calibration and componentization to support other applications of material libraries.

Provides inputs and help to any projects requiring the knowledge and experience in material constitutive model related developments and provides direction and supervision to more junior developers within the team.

Coordinates product design and development activities requiring extensive analysis in areas such as user experience, software design and solver research. Acts as a technical reference within a group or product

Develops and employs best practices and maintains them through technical reviews and mentoring

Performs complex bug verification, release testing and beta support across multiple products. Researches problems discovered by QA or product support and develops solutions, collaborating with the QA/support team

Researches and understands the marketing requirements for products, including target environment, performance criteria and competitive issues. May work with strategic customers or proxies to assess needs and develop solutions

Senior R&D Engineer (Materials) - Hybrid | Ansys | Handshake (joinhandshake.com)

For those planning on graduating in Fall of 2023 (otherwise known as term 2241 in PeopleSoft), you must apply to graduate to get your diploma (and, of course, successfully complete all appropriate coursework)!

Here is the timeline for Term 2241:

Graduation Application Late Fee Begins – 10/1/23-Starting today students will be charged a \$25 late fee.

Graduation Application Closes - 12/1/23

If you are working on a Master's or Doctoral Thesis-Final Day for ETD Paperwork & D-Scholarship Upload - Early December- (What to Do After You Defend Your Thesis/Dissertation | Electronic Theses and Dissertations (pitt.edu))

\*\*\*\*\*\*\*Please be advised, that if you have any questions, you can always reach out to me via email (jap306@pitt.edu) and phone number (412-383-4212). \*\*\*\*\*\*\*\*\*\*

#### Regards,

# James Petraglia (Pa-trail-ya)

Department and Graduate Support Administrator, Department of Informatics and Networked Systems, School of Computing and Information 135 North Bellefield Avenue Information Science Building, Room 521 Pittsburgh, PA 15260 Phone Number: 412-383-4212 Pronouns: He/Him/His

Weekly Schedule, 8:30am to 5pm, Monday - Friday

Available in-Person in IS Building Room 521 on Tuesdays from 11am to 12pm and Thursdays from 1pm to 2pm Available virtually every Wednesday from 4pm to 5pm- <a href="https://pitt.zoom.us/j/96524201536">https://pitt.zoom.us/j/96524201536</a>

# Degree Programs: www.dins.pitt.edu/academic-programs

The School of Computing and Information is committed to fostering a culture where work-life balance is valued and respected. Emails are most typically answered during usual business hours Monday through Friday. Please note, if I send emails outside of your typical work hours, I do not expect a reply from you on evenings or weekends in your time zone.

Hail to Pitt!