Alumni Speaker Series

Brian Giffin, PhD

Computational Mechanics Code Developer
Lawrence Livermore National Laboratory

1:00 PM PST, Tuesday, January 12th, 2021

Zoom Link:
https://ucdavis.zoom.us/j/95800327736?pwd=MGFMYUtEQXNSMi81Q2ZuK05HeVJZUT09

Meeting ID: 958 0032 7736
Passcode: 335735

Abstract: The Alumni speaker series is a unique opportunity for all the graduate students to directly interact with the UC Davis alumni. The one-hour seminar will be an interactive session where the current graduate students can ask and learn about the speaker's professional journey and experiences. The Alumni Speaker Series is hosted by Chemical Engineering and Material Science and Engineering Graduate Student Organization.

Biography: Dr. Brian Giffin is a computational mechanics code developer at Lawrence Livermore National Laboratory, serving as a member of the computational Methods Development Group (MDG) in the Defense Technologies Engineering Division (DTED). His current role oversees the development of the parallel finite element code ParaDyn/DYNA3D, used for the production-level simulation of nonlinear transient dynamic problems of general engineering interest. His recent work has emphasized the development of advanced continuum constitutive models for novel metallic and polymeric materials. Dr. Giffin obtained his Ph.D. in Computational Solid Mechanics (2018), M.S. in Structural Engineering & Mechanics (2014), and B.S. in Civil Engineering (2013) from the University of California, Davis. His doctoral dissertation explored the development of novel polyhedral finite element methods for application in nonlinear solid mechanics. In association with Lawrence Livermore National Laboratory, his master's thesis investigated a coupled poro-damage-mechanics finite element method for simulating hydraulic fracture processes. During his time at UC Davis, Dr. Giffin participated in multiple graduate student summer internship programs hosted by Sandia National Laboratories in Albuquerque, New Mexico, working alongside the Sierra Mechanics simulation code team. He is also a founding member of the Computational Mechanics Working Group (CMWG) graduate student organization at UC Davis.

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