Cheuk Lau

https://www.linkedin.com/in/cheuk-lau-31311626/

Email : cheuk.lau@aggienetwork.com

Mobile : +1-518-915-8165

Education

- **Insight** — Palo Alto, CA
  DevOps Engineering Fellows Program — *Jul. 2018 – Present*
- **Texas A&M University** — College Station, TX
  Doctorate of Philosophy in Computational Physics; GPA: 3.80 — *Aug. 2011 – May. 2016*
- **Pennsylvania State University** — University Park, PA
  Master of Science in Nuclear Engineering; GPA: 3.90 — *Jan. 2009 – Dec. 2010*
- **University of Illinois** — Urbana-Champaign, IL
  Bachelor of Science in Nuclear Engineering; GPA: 3.50 — *Aug. 2004 – May. 2008*

Experience

- **Insight** — Palo Alto, CA
  DevOps Fellow — *Jul. 2018 - Present*
  - **Project Name**: Provide the project description here, making this long because I suspect this should take a minimum of two lines (list software used here).
- **Lawrence Livermore National Laboratory** — Livermore, CA
  Computational Physicist — *Jul. 2016 - Jul. 2018*
  - **Code Verification**: Developed automated testing of scientific codes using standard verification and validation procedures (C++, Python, Bash).
  - **Code Developer**: Implemented and tested new methods from academic journals to further the capability of scientific codes in multiple disciplines e.g., plasma physics, fluid dynamics, radiation transport (C++, Git).
  - **Mentor**: Provided guidance and technical direction to PhD-level summer interns.
  - **Publications**: https://doi.org/10.3847/1538-4365/aa7ff5, https://e-reports-ext.llnl.gov/pdf/888520.pdf
- **Texas A&M University** — College Station, TX
  National Excellence Fellow — *Aug. 2011 - May. 2016*
  - **Code Developer**: Research on adaptive mesh refinement strategies for optimizing the computational efficiency of radiation transport codes (C++, Matlab, Git).
  - **Publications**: https://doi.org/10.13182/NSE16-28, http://oaktrust.library.tamu.edu/handle/1969.1/158050
- **Knolls Atomic Power Laboratory** — Niskayuna, NY
  Nuclear Engineer — *Aug. 2008 - Aug. 2011*
  - **Code Developer**: Implemented and tested new methods from academic journals to further the capability of radiation transport codes (C++, Fortran, Git).
  - **Field Testing**: Gathered instrumentation data from aircraft carriers and submarines for code validation.

Projects

- **TradeUp**: App allowing users to manage their trading card game (TCG) inventory, view other users' inventory in the same location, and propose in-person trades. Item values update in real-time using third-party APIs.
- **Catalog App**: **https://github.com/cheuklau/catalog_app** Sample app built on Flask demonstrating create, read, update and delete (CRUD) functionalities using an SQL backend with third-party authentication.
- **Neighborhood App**: **https://github.com/cheuklau/neighborhood_app** Sample app demonstrating the use of Javascript libraries (Knockout JS) and multiple third-party APIs (Google Maps and New York Times).
- **Adaptive Angular Quadrature**: **https://github.com/cheuklau/phd_research** PhD work developing linear discontinuous finite-element based angular quadratures.

Certifications – available upon request

- **Udemy DevOps**: Series of courses on DevOp tools (Docker, Kubernetes, Jenkins, Terraform, Prometheus).
- **Udacity Full-Stack Engineering Nano-Degree**: Certificate covering both front and backend development along with server deployment. (HTML, CSS, Javascript, jQuery, Knockout JS, Flask, SQL, Apache, AWS).
- **DataCamp Data Scientist with Python**: Certificate covering data manipulation, visualization, statistics and machine learning (Pandas, NumPy, Scikit-Learn).