

Joseph Curtis

Nuclear Engineer

Radiation Detection + Big Data + Medical Imaging

1526 Arch St Apt 4 Berkeley, CA 94708, USA 🏠
joseph.c.curtis@gmail.com ✉️
(831) 277 6231 📞
jccurtis.github.io 🌐
josephccurtis 📺

education

2012–2014 (Fall)	Masters of Science Nuclear Engineering (GPA 3.84) <i>Benchmarking the Gamma Ray Sensors Aboard a Mobile Platform</i>	University of California, Berkeley
2007–2011	Bachelor of Science Nuclear Engineering (GPA 3.86) <i>Honors Thesis: Measurements and Analysis of Fukushima Fallout by BRAWM</i>	University of California, Berkeley

awards

2014	Member of Alpha Nu Sigma	American Nuclear Society Honor Society
2013	Outstanding Graduate Student Instructor	Graduate Division, UC Berkeley
2011	Departmental Citation (Top GPA in graduating class)	Dept of Nuclear Engineering, UC Berkeley
2009	The Virgil Schrock Scholarship	Dept of Nuclear Engineering, UC Berkeley
2009	Member of Tau Beta Pi	National Engineering Honor Society

experience

Aug '12 – Present	Graduate Student Researcher Experimentally validating Monte-Carlo and raytracing gamma-ray physics simulations.	Lawrence Berkeley National Laboratory
Aug '11 – Aug '12	Junior Specialist Supported graduate radiation laboratory course with signal processing coding, machining and teaching.	Dept of Nuclear Engineering, UC Berkeley
Mar '11 – May '11	Honor's Research Assistant Analyzed environmental samples for Fukushima Daiichi Reactor fallout monitoring.	Dept of Nuclear Engineering, UC Berkeley
Jun '10 – Aug '10	Lab Technician & Instructor Trained students from the United States and Japan to perform digital radiation detection experiments.	UC Berkeley & University of Tokyo
Jan '09 – Dec '09	Thermo-Hydraulics Research Assistant Designed and experimentally verified a first order fluid mechanics model in MATLAB.	University of California, Berkeley
Jan '09 – May '09	Field Tester Aggregated traffic data with cell phone based GPS equipment by driving a test vehicle.	California Center for Innovative Transportation

leadership

2009–2014	Engineering for Kids Day (E4K) Coordinated logistics and safety for 300+ children during annual engineering outreach program.	College of Engineering, UC Berkeley
2012–2013	Head Graduate Student Instructor Led three other instructors to setup, conduct, teach and assess undergraduate course experiments.	Dept of Nuclear Engineering, UC Berkeley
2008–2011	American Nuclear Society Managed operations, organized outreach and liaised with national chapter as secretary, vp and president.	Student Chapter, UC Berkeley
2009–2010	Engineers Joint Council Facilitated annual budget allocation of college-wide funding for engineering student groups.	College of Engineering, UC Berkeley
2009	Tau Beta Pi Managed external relations with other student societies to foster collaborative relationships.	Student Chapter, UC Berkeley

skills

Programming: Python, MATLAB, git, Bash, HDF5, SLURM, \LaTeX , CSS & HTML

Techniques: Scalable high performance computing, Monte-Carlo methods, uncertainty analysis, gamma-ray spectroscopy