Amrit Patel

Regulatory Engineer

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Looking forward to collaborating with a team solving important problems with major worldwide impact.

Skills

Modeling and Simulation

- Physics modeling, simulation, and VVUQ; data analysis; process automation

Languages

- Python, R, Perl, Fortran

Leadership

- Principal contributor for advanced reactor license application and topical report development in various safety analysis contexts, general licensing strategist, and mentor of colleagues.

Experience

Oklo, Inc. *Remote*

Regulatory Engineer *April 2022 - Present*

- Development of regulatory-facing technical products in the realm of safety analysis.

NUMARK Associates, Inc. *Remote*

Consulting Engineer *July 2021 - April 2022*

- Commercial nuclear power plant licensing for an international regulatory authority specializing in core physics methods V&V.

Career Break *Kathmandu, Nepal*

Career Break *June 2020 - July 2021*

- Planned career break during COVID pandemic to focus on personal development and skill enhancement.

Lincoln School *Kathmandu, Nepal*

Secondary School Technology & Design Teacher *July 2019 - June 2020*

- Taught courses for students to develop 21st century skills with an emphasis on information and communication technology literacy, media and internet literacy, data interpretation and analysis, computer programming through use of the design cycle of thinking, making, and refining.

U.S. NRC *Rockville, MD*

Nuclear Engineer *March 2009 - June 2019*

- Planned/Conducted complex technical reviews in core nuclear engineering areas for the Offices of New Reactors and Nuclear Reactor Regulation (e.g., criticality, shielding, nuclear fuels, and method verication/validation) coordinating with project managers and technical staff in cross-cutting disciplines for several large projects (e.g., new reactor licensing, license renewal).
- Planned/Conducted research for the Office of Research: FAVOR/DAKOTA coupling for uncertainty quantification studies; SCALE-MAVRIC/DAKOTA coupling for uncertainty quantification studies to assess safety margins of degraded PWR bioshield concrete.
- Proficient in safety evaluation reporting and confirmatory analysis including: Use of computer codes to perform simulations (e.g., SCALE code suite, MCNP, DAKOTA); complex data analysis using statistical software packages; use of various programming/scripting languages for software development, input/output processing, database management, and creating dynamic figures/reports/presentations.
- Communication and reporting skills: Development and presentation of original research in support of NRC guidance development for various audiences (e.g., senior level management, ACRS, national/international conferences).

Education

University of Florida *Gainesville, FL*

MS, Nuclear Engineering *2006 - 2009*

- Research Assistant for radiation transport theory course
- Master's thesis: Detailed Neutron Flux Characterization of the Experimental Shield Tank Facility at the UFTR
- Received EIT certification

University of Florida *Gainesville, FL*

BS, Nuclear Engineering *2002 - 2006*

- Inducted into Alpha Nu Sigma Honor Society
- Member of American Nuclear Society (UF Chapter)