Prashant Kumar

(412) 580 9826 ▪ pkumar0508@gmail.com

TECHNICAL SKILLS

C++, Golang, Python, Git, SQL, Shell Scripting

EXPERIENCE

Google   **New York, NY**
Software Engineer   2018 – Present

- Wrote ETL job to load unified source of truth in Spanner for Legal, Compliance, and Finance

Bloomberg LP   **New York, NY**
Software Engineer   2015 – 2018

- Automated build and managed build dependencies for legacy C++ monolith of over 1 MLOC
- Authored specification for next-generation accounting-grade persistent data structure schemas
- Led three engineers in producing gRPC prototypes according to specification in C++ and Golang
- Assisted in critical production issues affecting $1B+ AUM clients' ability to conduct trading

TFS Capital   **West Chester, PA**
Quantitative Analyst   2013 – 2015

- Wrote Matlab unit tests for automated futures trading code handling $200MM+ AUM
- Calibrated convertible bond PDE models with historical data for bond pricing in Excel/Matlab
- Improved futures execution for expected savings of 270 basis points annually on $65MM AUM

Vanguard   **Malvern, PA**
Software Engineer   2012 – 2013

- Presented benefits of Groovy to senior staff, leading to adoption into enterprise Java tech stack
- Resolved Axioma and MarketQA production issues for global equity business of $1T+

University of Pittsburgh   **Pittsburgh, PA**
Research Assistant   2006 – 2011

- Automated analysis routines in Matlab and Python to process 100+ GB of simulation data
- Replaced non-parallel molecular dynamics engine with LAMMPS to leverage multi-core systems
- Simulated flow of salt water and gas mixtures through carbon nanotubes using molecular dynamics and calculated electrostatic distributions using density functional theory techniques
- Disproved pharmacokinetic model structures by fitting parameters to experimental mice data

EDUCATION

University of Pittsburgh
Master of Science in Chemical Engineering   2008 – 2011
Bachelor of Science in Chemical Engineering   2005 – 2008