Junbeom Lee

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Employment History

- **Dept of Math, National University of Singapore** — **Singapore**
  Research Fellow — *Aug 2018 - present*
  - XVA: CVA, DVA, FVA, MVA, economic capital
  - Ruin probability
- **FN-Pricing** — **Seoul, South Korea**
  Quant — *Sept 2012 – Jul 2014*
  - Developing and managing a C++ pricing engine for hybrid derivatives
  - Connecting the C++ pricing engine to Microsoft Excel
  - Arbitrage-free implied volatility surfaces (SVI & SSVI)
  - Volatility calibration of two-factor Gaussian term structure models
  - Least-Square Monte Carlo
- **933 Artillery** — **Paju, South Korea**
  Squad leader — *Mar 2007 – Mar 2009*
  National service

Education

- **National University of Singapore** — **Singapore**
  Ph.D. of Mathematics — *Aug 2014 – Aug 2018*
  Thesis: Bilateral contracts under XVA
- **Sungkyunkwan University** — **Suwon, South Korea**
  Master of Mathematics — *Sept 2011 – Feb 2013*
  Thesis: A study on the regularity criteria for the solutions to 3D MHD
- **Sungkyunkwan University** — **Suwon, South Korea**
  Bachelor of Mathematics — *Mar 2006 – Aug 2011*

Papers

- Lee, J., Sturm, S., & Zhou, C. (2019). A Risk-Sharing Framework of Bilateral Contracts. arXiv preprint arXiv:1901.03874.
- Lee, J., & Zhou, C. (2017). A Binary Nature of Funding Impacts in Bilateral Contracts. arXiv preprint arXiv:1703.00259.

Computing Skills

C, C++, Python, Clojure, Ruby, Emacs Lisp, SQL

Websites

- https://www.linkedin.com/in/junbeoml22
- https://github.com/JunbeomL22/BSDE-engine (BSDEs with initial margin)

References

- **Immediate boss at FN-Pricing**
  Dr. Minjae Kim
  Manager, NH Investment & Securities Associate
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- **Ph.D. adviser**
  Prof. Chao Zhou
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