CURRICULUM VITAE

Yuan-Yuan Shen
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Education

Tunghai University (in Taiwan)	B.S.	1972-1976
Illinois Institute of Technology	M.S.	1979-1981
University of Maryland at College Park	Ph.D.	1981-1988

Professional Experience

Tunghai University (in Taiwan)	Teaching Assistant	1978-1979
Catholic University of America	Assistant Professor	1988-1993
Catholic University of America	Associate Professor	1993-1994
Tunghai University (in Taiwan)	Associate Professor	1994-1997
Tunghai University (in Taiwan)	Professor	1997-2019

Areas of Interest

Simplest Fields, Number theory, Cryptology, Algebra

Publications
Articles

1. Shen, Y.-Y. : *Unit groups and class numbers of real cyclic octic fields*,
   Transactions of the Amer. Math. Soc. **326**, Number 1 (1991), 179–209.

2. Shen, Y.-Y. and Washington, L.C. : *A family of real 2^n-tic fields*,
   Transactions of the Amer. Math. Soc. **345**, Number 1 (1994), 413–434.

3. Shen, Y.-Y. and Washington, L.C. : *A family of p^n-tic fields*,
   Can. J. of Math., **47**, Number 3 (1995), 655–672.

4. Shen, Y.-Y. : *Exploring the number e and Stirling's constant with* MATHEMATICA,
   Tunghai Journal, **36**, (1995), 79–96.

5. Shen, Y.-Y. : *On characterizations of the gamma function*,
   Math. Mag. of the Math. Asso. of Amer., **68**, No. 4, (1995), 301–305.

6. Shen, Y.-Y. : *From Euler's number e to Stirling's constant $\sqrt{2\pi}$*,
   Mathmedia, Institute of Math., Academia Sinica, **20**, Number 1 (1996), 34–45.

7. Shen, Y.-Y. : *Telescoping Factors on Inequalities*,
   Tunghai Journal, **39**, (1998), 45–51.

8. Shen, Y.-Y. : *Is the big one cute, or the small one?*,
   Mathmedia, Institute of Math., Academia Sinica, **22**, Number 4 (1998), 50–53.

9. Shen, Y.-Y. : *Exploring the Sums of Powers of Consecutive Integers with* MATHEMATICA,
   Tunghai Science, **2**, (2000), 55–68.

10. Shen, Y.-Y. : *Climbing to Mount Ali, by Train or by Helicopter?*
    Mathmedia, Institute of Math., Academia Sinica, **25**, Number 2 (2001), 78–87.

11. Shen, Y.-Y. : *A Prelude to Modern Cryptography with* MATHEMATICA,
    Mathmedia, Institute of Math., Academia Sinica, **27**, Number 1 (2003), 68–74.

12. Shen, Y.-Y. : *Exploring the Sums of Negative Powers of Positive Integers with* MATHEMATICA,
    Tunghai Science, **5**, (2003), 61–75.

13. Shen, Y.-Y. : *A Note on the Sums of Powers of Consecutive Integers*,
    Tunghai Science, **5**, (2003), 101–1065. Cited in `http://ii.uwb.edu.pl/akk/sem/sem_rota.htm`

14. Shen, Y.-Y. : *A Puzzle with Infinitely Many Pieces*,
    Mathmedia, Institute of Math., Academia Sinica, **28**, Number 3 (2004), 12–26.

15. Shen, Y.-Y. : *A Relaxing Journey to Number Theory with* MATHEMATICA,
    Mathmedia, Institute of Math., Academia Sinica, **29**, Number 4 (2005), 45–71.

16. Shen, Y.-Y. : *A Journey to Classical Cryptography with* MATHEMATICA *I*,
    Mathmedia, Institute of Math., Academia Sinica, **30**, Number 1 (2006), 61–80.

17. Shen, Y.-Y. : *A Journey to Classical Cryptography with* MATHEMATICA *II*,
    Mathmedia, Institute of Math., Academia Sinica, **30**, Number 2 (2006), 55–76.

18. Shen, Y.-Y. and Lin, W.-Y. : *An Elliptic Curve Version of ElGamal Digital Signature*,
    Tunghai Science, **8**, (2006), 1–15.

19. Shen, Y.-Y. and Liao, H.-Z. : *On the Elliptic Curve Digital Signature Algorithm*,
    Tunghai Science, **8**, (2006), 71–88.

20. Shen, Y.-Y. and Lin, C.-H. : *An Elliptic Curve Version of Dynamic Secret Sharing Scheme*,
    Tunghai Science, **9**, (2007), 137–156.

21. Shen, Y.-Y. : *On the Convergence of Alternating Series*,
    Mathmedia, Institute of Math., Academia Sinica, **35**, Number 3 (2011), 22–30.

22. Shen, Y.-Y. : *A Journey to Modern Cryptography*,
    Mathmedia, Institute of Math., Academia Sinica, **35**, Number 4 (2011), 34–48.

23. Shen, Y.-Y. : *Abstract Algebra Is It Really Abstract? I*,
    Mathmedia, Institute of Math., Academia Sinica, **36**, Number 2 (2012), 34–51.

24. Shen, Y.-Y. : *Abstract Algebra Is It Really Abstract? II*,
    Mathmedia, Institute of Math., Academia Sinica, **36**, Number 3 (2012), 24–40.

25. Shen, Y.-Y. and Liao, Y.-H. : *On the Mobil Electronic Check System*,
    Tunghai Science, **6 8**, (2014), 1–15.

26. Shen, Y.-Y. : *From Fermat to Lagrange*,
    Mathmedia, Institute of Math., Academia Sinica, **39**, Number 1 (2015), 39–45.

27. Shen, Y.-Y. : *Rare Integers*,
    Mathmedia, Institute of Math., Academia Sinica, **39**, Number 3 (2015), 30–41.

28. Shen, Y.-Y. : *Walking with Wallis–Exploring* π,
    Mathmedia, Institute of Math., Academia Sinica, **42**, Number 4 (2019), 46–70.

Monographs

1. *Exploring Some Topics From Advanced Calculus with* MATHEMATICA, preprint (2002), 150 pp. This work received an award from Tunghai University for Creative Teaching Excellence in the year of 2002.

2. *A Journey to Cryptography with* MATHEMATICA, Open Tech (2006), 360 pp. (ISBN:978-957-21-5210-2) This work received an award from Tunghai University for Creative Teaching Excellence in the year of 2005.

3. *Brief Elementary Differential Equations*, Wu Nan Book Inc. (2008), 300 pp. (ISBN:978-957-11-5267-7) This work received an award from Tunghai University for Creative Teaching Excellence in the year of 2008.

4. *Mission Impossible–A Legend on Public Key Cryptography*, Sanmin Book Inc. (2015), 270 pp. (ISBN:978-957-14-5991-2)

Awards, Honors

1. Membership in Phi Tau Phi Scholastic Honor Society, 1976

2. Certificate of Creative Teaching Excellence from Tunghai University, 2002

3. Certificate of Creative Teaching Excellence from Tunghai University, 2005

4. Certificate of Creative Teaching Excellence from Tunghai University, 2008

Service to the Mathematical Community, and the University

1. Reviewer for Mathematical Reviews of AMS
2. Proctor for University Entrance Examination, 1996
3. Grader for University Entrance Examination Center in Math., 1998-present
4. Chairperson of the Dept. of Math., 1998-2000
5. Reviewer for Promotion of Professor in the Dept. of Envi. Science, 2003
6. Reviewer for Promotion of Professor in the Dept. of Physics, 2003
7. External Reviewer for Dept. of Math., Feng Chia Univ., Taiwan, 2003

Courses Taught

1. Calculus I, II, and III

2. Mathematics in Modern World

3. Elementary Linear Algebra

4. Advanced Calculus I and II

5. Elementary Differential Equations

6. Number Theory and Its Applications

7. Number Theory and Cryptography

8. Abstract Algebra I and II

9. Finite Fields and Coding Theory

Theses Directed

01.	Chen, Bi-Hung	RSA Cryptosystem over Matrices	M.S.	June 1997
02.	Chen, Chan-Mow	Cryptography and Factorization	M.S.	June 1998
03.	Huang, Chi-Ching	A New Factorization Algorithm	M.S.	June 1999
04.	Chang, Tsau-Shiun	Variants of Digital Signature Scheme	M.S.	June 2000
05.	Xue, Quan-Yi	A Model for a Fish Market Economy	M.S.	June 2002
06.	Chiwan, Wen-Chin	Variants of Menezes-Vanstone ECC	M.S.	June 2002
07.	Lin, Wen-Yi	Elliptic ElGamal Digital Signature	M.S.	June 2003
08.	Wang, Chieh	Variants of ECC	M.S.	June 2003
09.	Wu, Chia-Huan	Public-Key Cryptosystems&Digital Signature	M.S.	June 2005
10.	Ong, Rong-Mao	Elliptic ElGamal Threshold Cryptosystem	M.S.	June 2005
11.	Lin, Ching-Huai	Elliptic Dynamic Secret Sharing Scheme	M.S.	June 2006
12.	Liao, Hung-Zih	Elliptic Digital Signature Algorithm	M.S.	June 2006
13.	Hsu, Yon-Shan	Dynamic Electronic Voting System	M.S.	Jan. 2007
14.	Chan, Yu-Te	Dynamic Conference Key Distribution System	M.S.	June 2007
15.	Chiu, Chun-Teng	Elliptic Date Attachable Scheme on E-cash	M.S.	June 2007
16.	You, Jhih-Yi	Elliptic Network Auction	M.S.	June 2007
17.	Chang, Fei-Yi	Elliptic Online Banking	M.S.	June 2008
18.	Chang, Shiun-Yin	Elliptic Digital Cash	M.S.	June 2009
19.	Shieh, Hon-Chuan	On the Sealed Bidding	M.S.	June 2010
20.	Lai, Chong-Bon	On the Electronic Voting System	M.S.	June 2010
21.	Chen, Ying-Chung	Online SAT Sysytem and Its Improvement	M.S.	Jan. 2011
22.	Chen, Ching-Yin	Elliptic Threshold Digital Signature	M.S.	June 2011
23.	Chang, Chia-Jer	On Commutativity of Boolean p-rings	M.S.	Jan. 2011
24.	Don, Yu-Chen	On the Boolean p-ring	M.S.	Jan. 2011
25.	Lee, Ming-Shang	Cryptographic Electronic Patent App	M.S.	Jan. 2012
26.	You, Jin-Zong	Perfect Electronic Voting System	M.S.	June 2012
27.	Lee, Yong-Lin	Electronic Lottery System	M.S.	June 2013
28.	Tao, Dai-Ko	Elliptic Electronic Voting System	M.S.	June 2013
29.	Liao, Yuan-Hon	On the Dynamic Digital Check System	M.S.	June 2013
30.	Chen, Yun-chin	On the Smart Lottery System	M.S.	June 2014
31.	Sinaga, Indry	On Primitive Roots and Chebyshev Polys	M.S.	June 2016
32.	Liu, Moo-Fei	Elliptic Factorization Algorithm	M.S.	June 2016
33.	Hon, Yu-Cheng	On the Discrete Logarithm Problem	M.S.	June 2019

References

- Professor Lawrence C. Washington

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  University of Maryland

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