

SHIVAJI'S GRADUATE STUDENTS



Shivaji with some of his students at a conference. This 2014 conference was dedicated to Shivaji.

SUMMARY: Shivaji has been a highly successful and inspiring dissertation advisor. He has facilitated the achievements of 16 PhD graduates. He has also advised one post-doctoral student, and 15 MA graduates. 9 out of these 16 PhD students and one of these 15 MA students graduated since he joined UNCG in 2011. Currently, he is advising three more PhD students and one more MA student.

Every Ph.D. graduate of his secured academic/industry position soon after graduation, despite the challenging employment climate in mathematics. In fact, three obtained excellent postdoctoral positions, one recently at University of Miami to work with Professor Chris Cosner (a world-renowned mathematical ecologist), and two at University of West Bohemia, Czech Republic to work with Professor Pavel Drabek (recipient of the Bernard Bolzano Honorary Medal “For Merits in the Mathematical Sciences” in 2013, awarded by the Academy of Sciences of the Czech Republic).

Many of his former students are now excelling in their careers. For example, one of his Ph.D. students, who is now an Assistant Professor at Indian Institute of Technology (IIT), received the prestigious INSPIRE Faculty (five year) Award of the Government of India (which is equivalent to the NSF Career Award here), one is a full professor here at UNCG (now she holds a Simons research award), one was a Distinguished Research Associate Professor and now a full professor at Auburn University (at

Montgomery) (to date, he has received 3 NSF awards for his research), one is a full professor at Florida Gulf Coast University, one a Distinguished Senior Systems Design Engineer at Sonus Networks, Inc., and one is a Fellow of the Society of Actuaries, currently at Wakely Consulting Actuaries and Healthcare specialists. Further, one of his masters' students is now the President and CEO of the Ford Motor Credit Company, and another is a Fellow of the Society of Actuaries and Senior Vice President/Chief Actuary at Southern Farm Bureau Life.

Several of his Ph.D. students have been recognized for their excellence in research, (Graduate Student Research Excellence Awards). To date, four times (2017, 2019, 2020 & 2021) by the Department of Mathematics & Statistics at UNCG, and five times (1999, 2002, 2007, 2008 & 2009) by the College of Arts & Sciences at Mississippi State University (1999, 2002, 2007, 2008 & 2009). Two of his Ph.D. students were also recognized for their excellence in teaching (2016 & 2020) by the Department of Mathematics & Statistics at UNCG. While at UNCG, he also directed a Ph.D. student at the Indian Institute for Technology (IIT) in Madras, a premier institution in India. An external review committee ranked this student's Ph.D. dissertation as the best in mathematics at IIT in 2019.

DETAILS:

Postdoctoral Student (1)

Eun Kyoung Lee, Pusan National University, South Korea (2007 – 2009).

Dissertation Advisor for Ph.D. Students (19)

Current (at UNCG)

1. Ananta Acharya, UNCG (expected to graduate in 2023).
2. Alketa Henderson, UNCG (expected to graduate in 2024).
3. Dustin Nichols, UNCG (expected to graduate in 2024).

Past (while at UNCG)

4. Amila Muthunayake, UNCG, Ph.D. 2021. Thesis titled: *Analysis of positive solutions for classes of nonlinear reaction diffusion equations and systems.*

5. Nalin Fonseka, UNCG, Ph.D. 2020. Thesis titled: *Mathematical and Computational Analysis of Reaction Diffusion Models Arising in Ecology.*

6. Mohan Mallick, Indian Institute of Technology (IIT), Chennai, India, Ph.D. 2019. Thesis titled: *Steady state reaction diffusion equations with falling zero reaction terms and nonlinear boundary conditions.* **His thesis was judged as the best mathematics thesis for 2019 awarded by IIT-Chennai.**

7. Quinn Morris, UNCG, Ph.D. 2017. Thesis titled: *Analysis of classes of superlinear semipositone problems with nonlinear boundary conditions.*

8. Byungjae Son, UNCG, Ph.D. 2017. Thesis titled: *Analysis of classes of singular steady state reaction diffusion equations.*

9. Dagny Butler, MSU, Ph.D. 2014. Thesis titled: *Analysis of classes of nonlinear eigenvalue problems on exterior domains.*

10. Lakshmi Sankar Kalappattil, MSU, Ph.D. 2013. Thesis titled: *Classes of singular nonlinear eigenvalue problems with semipositone structure.*

11. Eunkyung Ko, MSU, Ph.D. 2012. Thesis titled: *Analysis of classes of singular boundary value problems.*

12. Sarath Sasi, MSU, Ph.D. 2012. Thesis titled: *Alternate stable states in ecological systems.*

Past (while at MSU)

13. Jerome Goddard II, MSU, Ph.D. 2011. Thesis titled: *Classes of reaction diffusion equations with nonlinear boundary conditions.*

14. Jinglong Ye, MSU, Ph.D. 2009. Thesis titled: *Infinite semipositone systems*.

15. Jaffar Ali Shahul Hameed, MSU, Ph.D. 2008. Thesis titled: *Multiple positive solutions for classes of elliptic systems with combined nonlinear effects*.

16. Scott Caldwell, MSU, Ph.D. 2003. Thesis titled: *Positive solutions for classes of nonlinear reaction diffusion problems*.

17. Shobha Oruganti, MSU, Ph.D. 2002. Thesis titled: *Positive solutions for classes of nonlinear elliptic boundary value problems*.

18. Maya Chhetri, MSU, Ph.D. 1999. Thesis titled: *Solvability of classes of semipositone problems*.

19. V. Anuradha, MSU, Ph.D. 1994. Thesis titled: *Solvability of classes of nonlinear boundary value problems*.

M.S. Students (16)

Current (at UNCG)

1. Whitney Bennett, UNCG, M.A., 2023.

Past (while at UNCG)

2. Keri Spetzer, UNCG, M.A. 2018. Project Title: *Positive Solutions for a class of Nonlinear Boundary Value Problems*.

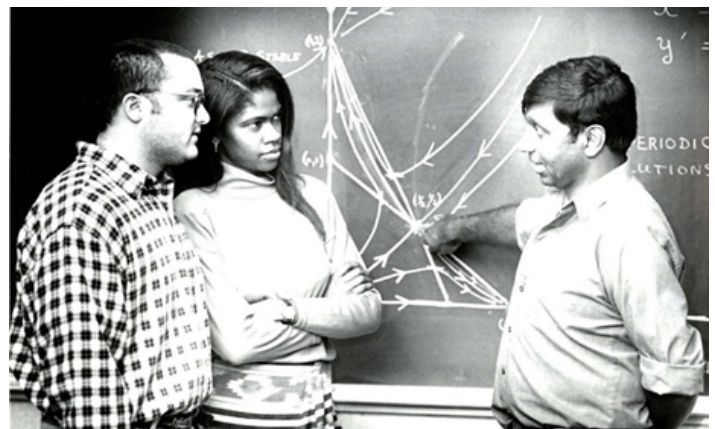
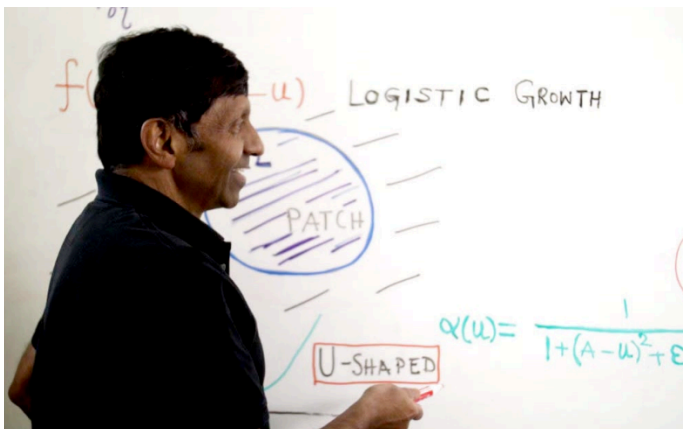
Past (while at MSU)

3. Fatma Bakan, MSU, M.S. 2006. Project title: *Infinitely singular semipositone problems*.

4. Bharanikumar Chandrasekaran, MSU, M.S. 2004, Project title: *An existence result in population dynamics*.

5. Anuradha Eaturu, MSU, M.S. 2002. Project title: *Generalized logistic equation with diffusion and harvesting*.

6. Bobby Jarrell, MSU, M.S. 1997. Project title: *Pohozaev's identities & applications.*
7. Scott Caldwell, MSU, M.S. 1996. Project Title: *Fixed point theorems & applications to differential equations.*
8. Chad Brown, MSU, M.S. 1994. Project title: *Maximum principles & symmetry of solutions.*
9. Kumar Tiwari, MSU, M.S. 1994. Project title: *Maximum principles & applications to ODEs.*
10. Marion B. Harris, MSU, M.S. 1993. Project title: *Bifurcation results for a class of two-point boundary value problems.*
11. Stanley Dickens, MSU, M.S. 1993. Project title: *An existence result for classes of non-autonomous semipositone problems.*
12. Wenyue Wang, MSU, M.S. 1992. Project title: *Degree theory.*
13. Ahmed Khamayseh, MSU, M.S. 1990. Thesis title: *Positive solutions for classes of semipositone boundary value problems.*
14. Agnes Miciano, MSU, M.S. 1990. Thesis title: *Multiple positive solutions for a class of semipositone two-point boundary value problems.*
15. Jin San Yang, MSU, M.S. 1988.
16. El-Shamy Sevgan, MSU, M.S. 1988.



Graduate Student Awards

Best Paper Awards - Mathematical Association of America (LA-MS) Section meetings (Graduate Student Paper Competition)

- Agnes Miciano (1989 & 1990)
- Anuradha Vishwanathan (1991)
- Stanley Dickens (1993)
- Chad Brown (1994)
- Bobby Jarrel (1997)

College of Arts & Sciences (MSU) Graduate Student Research Awards (based on their Ph.D. thesis research work)

- Maya Chhetri (1999)
- Shobha Oruganti (2002)
- Jaffar Ali Shahul Hameed (2007)
- Jinglong Ye (2008)
- Jerome Goddard II (2010)

Best Presentation Award - 2022 Virtual International Student Conference, Virginia Commonwealth University

- Ananta Acharya (2022)

Department of Mathematics & Statistics, UNCG, Graduate Student Research/Teaching Excellence Awards

- Ananta Acharya (Research 2021)



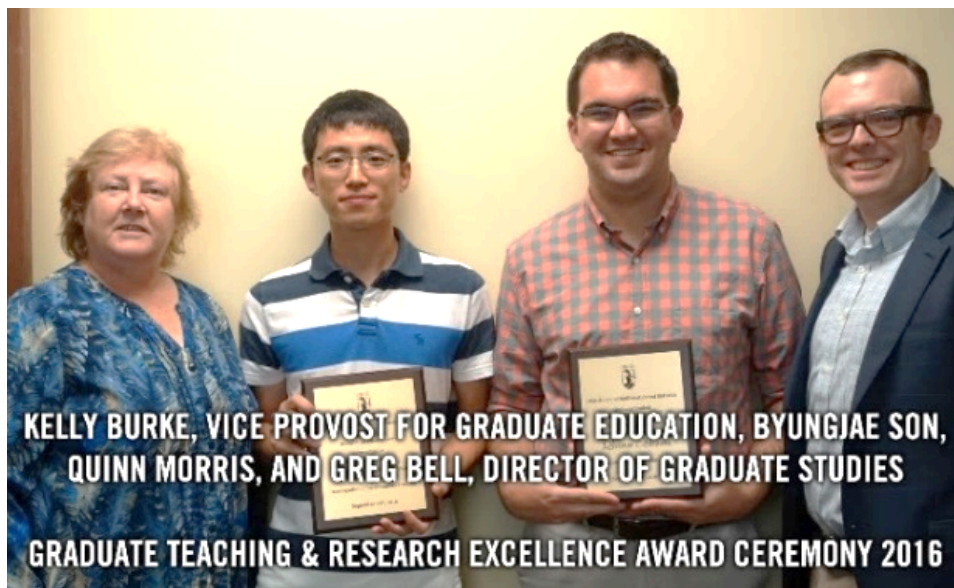
- Amila Muthunayake (Teaching 2019, Research 2020)



- Nalin Fonseka (Research 2019)



- Byungjae Son (Research 2017). Quinn Morris (Teaching 2017)



Some quotes from letters/notes received by his former PhD students

Nalin Fonseka, a former PhD student at UNCG and currently an Assistant Professor at Carolina University (and an MAA Project NExT Fellow) writes "Shivaji has been an awesome mentor, teacher, and an academic father to me. He has been one of the single most positive influences in my life".



Quinn Morris, a former UNCG PhD student and currently an Assistant Professor at Appalachian State University (and an MAA Project NExT Fellow) writes "the mentorship I received from Dr. Shivaji helped me immensely on the job market. I was told by several search committees how unusual it was to see someone directly out of graduate school with several refereed journal publications".



Jerome Goddard II, a former PhD student at Mississippi State University and currently a Full Professor at Auburn University Montgomery writes "Thanks for all you have done for me and my career. I would not be where I am today without your continuous mentoring, encouragement, and support. It's truly an honor to be one of your students."



Dagny Grillis, a former PhD student (who obtained her PhD from Mississippi State University but did so while at UNCG) and currently a Consulting Actuary at Wakely, writes 'Dr. Shivaji is really unique among teachers, and he was a major influence in my life and a wonderful mentor'.



Jaffar Ali Shahul Hameed, a former MSU PhD student and currently a Full Professor at the Florida Gulf Coast University writes "Prof. Shivaji is truly an academic father; he took care of his students (not just me, everyone that I know worked under him) as if we are his kids". Clearly, Shivaji's mentoring goes far beyond academic mentoring. He establishes a lifelong bond with his students.



Eunkyung Ko, a former PhD student at Mississippi State University and currently an Assistant Professor at the Keimyung University (South Korea) writes "You are not a mentor but a great mentor to me. Having you as my advisor is the best luck in my life".



Amila Muthunayake, a former PhD student at UNCG and currently an Assistant Professor at Weber State University writes "Shivaji was an awesome teacher, mentor, and an academic father to me. He has been one of the single most positive influences in my life and I am extremely fortunate to have been one of his students. His dedication to teaching, research, and mentoring make him a precious asset to UNCG."



More quotes from his PhD students at a conference dedicated to Shivaji

Dear Shivaji.

Happy Birthday ~

The most blessed thing
in my life is that I've met you.

Thank you for everything
that you showed me.

Best. - Your friend Ean -

FOR MY AWESOME, EXCELLENT
ADVISOR, TEACHER, MENTOR AND
ABOVE ALL, A TRUE ACADEMIC
FATHER,...

HEARTY WISHES...

ಶಿವಾಜಿ ಶಿಸ್ತು
ವಾಣಿ ಶಿರಾಜಿ...

Abhulali

Happy 60th Birthday!!
You are not a good mentor
but a great mentor to me.
Having you as my advisor is
the best luck in my life.
Thank you. Dr. Shivaji.
Honda girl, Emkyung

Happy 60th Birthday,
Dr. Shivaji! Thank you
for being such an integral
part of my life. You are
the best teacher, adviser,
and mentor ever!

Best wishes,
Dagny

Shivaji,

Thanks for all you've done for
me and my career. I would not
be where I am today without your
continuous mentoring, encouragement,
and support. It's truly an honor to
be one of your students.

Thanks,
Jerome Goddard II

Dr. Shivaji,

Many thanks for all
your help as I work
towards my doctorate! Best
wishes for a very happy
birthday.

Quinn Hovars

You have inspired an entire industry
of "Semipositone Problems"! I am
proud to be a product of this industry.
Congratulations on your first
sixty years of accomplishments and
best wishes for the next sixty years!

Maya

I am never more proud than when
I tell people "I am Shivaji's student."
Thanks for everything you taught me.
I only regret you were never able to
figure out my serve. I guess that
will have to remain an open problem.

Scott

Sending heartfelt congratulations
and best wishes for your future.

- Byungjae Son.

Dr. Shivaji's passion for Mathematics
has always inspired his students
to excel in this field!
Congratulations - A. Sridhar

I wish you
good health & happiness
in life today and always!

Jinglong.

Dear Dr. Shivaji,

Your passion for Mathematics, boundless
generosity, and genuine concern for the
well-being of those around you has always
inspired me. Thank you so much for making
us a part of your family.

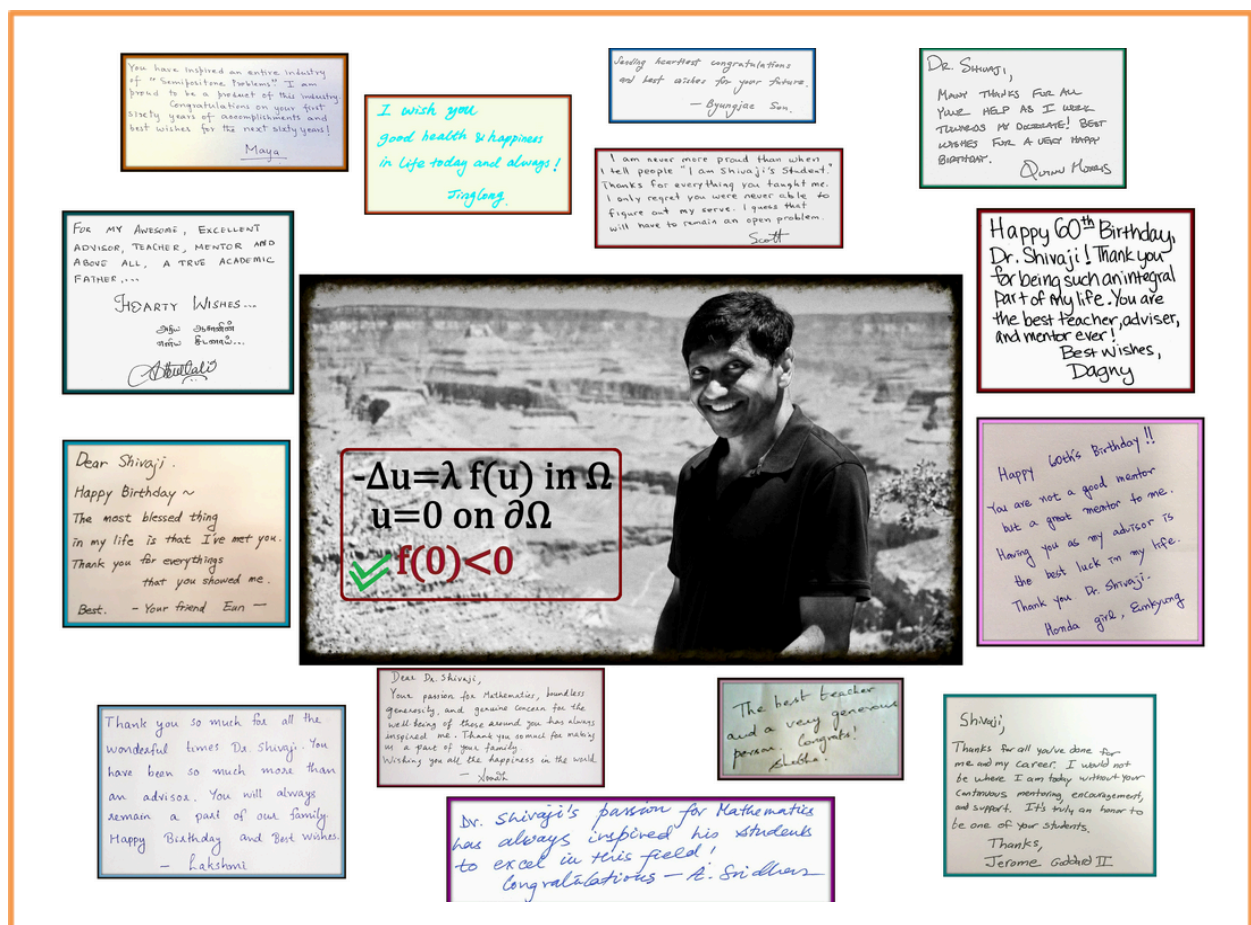
Wishing you all the happiness in the world

- Xianzh

Thank you so much for all the
wonderful times Dr. Shivaji. You
have been so much more than
an advisor. You will always
remain a part of our family.
Happy Birthday and Best wishes.

- Lakshmi

The best teacher
and a very generous
person. Congrats!
Shelba.



A quote from a former colleague's letter

Jimmy L. Solomon, former department head and dean at Mississippi State University writes " I often envision Shivaji as a professor out in shade of the trees with his students sitting at his feet, absorbing, engaging, participating, appreciating, and enjoying the opportunity."

