

# DOUGLAS JOHNSON

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## EDUCATION

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- Texas A&M Corpus Christi** *August 2015*  
College of Science & Engineering  
M.S. in Mathematics
- Texas A&M College Station** *August 2005*  
Dwight Look College of Engineering  
B.S. in Civil Engineering

## TEACHING AND WORK EXPERIENCE

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- Texas A&M Corpus Christi: College of Science & Engineering** August 2016 - Present  
*Instructor* *Corpus Christi, TX*
- Taught in the Math Department
  - Generating content to aid students in their understanding of Mathematics
- Victoria College** August 2016 - May 2017  
*Mathematics Instructor* *Victoria, TX*
- Texas A&M Corpus Christi: College of Science & Engineering** August 2015 - June 2016  
*Visiting Instructor* *Corpus Christi, TX*
- Taught in the Engineerig Department
  - Showed engineering students how to utilize Graphical Software for design and how to utilize mathematics for engineering problems.
- Esenjay Petroleum** 2007-2015  
*Engineer* *Corpus Christi, TX*
- Estimated oil and gas reserves for existing and potential wells and gave drilling recommendations
- Texas A&M Corpus Christi: College of Science & Engineering** 2012 - 2013  
*Grader* *Corpus Christi, TX*
- Graded homework and quizzes for Differential Equations (Math 3315)
- Coffee Waves** 2007-Present  
*Owner* *Corpus Christi, TX*
- Operated (2007-2012). Managed, compiled processes and procedures and trained the staff
  - Mentored management before fully turning operations over in 2012
- Rock Engineering & Testing Laboratory Inc.** 2005-2006  
*Project Manager* *Corpus Christi, Tx*
- Oversaw geotechnical and construction material tests and prepared official reports

## Classes Taught

2015-Present

College Algebra (MATH 1314)	Mathematics for Business & Social Sciences (MATH 1324)
Calculus I (MATH 2413)	Elementary Statistical Methods (MATH 1342)
Foundations of Engineering I (ENGR 1211)	Material Science Lab (ENGR 2322)
Foundations of Engineering II (ENGR 1312)	Strength of Materials Lab (ENGR 3320)
Statics (ENGR 2325)	Fluid Mechanics (ENGR 3315)
Statistics for Life (Math 1442)	Precalculus (Math 2312)
Trigonometry (Math 1316)	Developmental Mathematics (Math 0300)

## AWARDS & CERTIFICATIONS

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### Outstanding Mathematics Graduate Student

*Texas A&M University Corpus Christi*

2015

*Corpus Christi, TX*

### Coastal Bend Business Plan Competition

*TAMUCC Coastal Bend Business Innovation Center*

2012

*Corpus Christi, TX*

- 2012 Winner
- Proposal Title: Coastal Bend Aerospace
- Proposal for lighter-than-air craft as a launch platform for small high altitude unmanned vehicles

### Engineer in Training (EIT)

*Texas Board of Professional Engineers*

*Austin, TX*

- License Number: 37424

## CONFERENCES & RESEARCH PROJECTS

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### Texas Differential Equations Conference

*Texas State University*

2016

*San Marcos, TX*

- Presentation Title: Analytic Solutions for the Temperature Distribution in a Semicircular Domain with mixed Boundary Conditions

### Coastal Bend Mathematics and Statistics Symposium

*Texas A&M University Corpus Christi*

2016

*Corpus Christi, TX*

- Member of organization committee
- Presentation Title: Solutions for the Temperature Field in a Semicircular Domain with Dirichlet & Neumann Boundary Conditions

**95th Annual Texas Section Meeting of the Mathematical Association of America** 2015  
*Mathematical Association of America (MAA)* *San Antonio, TX*

- Presentation Title: Explicit forms of Solutions for the Temperature Field in a Bioflow Reactor Model

**19th Annual Student Conference for Research and Creative Arts** 2013  
*University of Houston* *Houston, TX*

- Presentation Title: A Deterministic Model of Appeasement

**Texas A&M Corpus Christi, College of Science & Engineering** 2011-2012  
*Near Space Project* *Corpus Christi, TX*

- Developed proof of concept lighter-than-air craft which ascended to 50,000' as a high altitude test platform
- Provided technical support, design concepts and mathematical models of the vehicle's ascent

### MASTERS LEVEL COURSE WORK

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Numerical Analysis (MATH 5339)	Adv. Differential Equations (MATH 5336)
Mathematical Theory of Statistics (MATH 5343)	Complex Anlysis & Applications (MATH 5390)
Research Methods in Math (MATH 5394)	Linear Statistical Models (MATH 5342)
Applied Mathematics (MATH 5390)	Real Analysis (MATH 5351)
Theo. & App. Partial Differential Equations (MATH 5337)	Analytical Methods in Applied Mathematics (MATH 5390)
Numerical Linear Algebra (MATH 5333)	

### COMPUTER SKILLS

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Experience on:

- Matlab
- Autodesk Autocad 2016
- Autodesk Inventor 2016
- WaterCad
- Visual Basic Analysis
- Latex
- Microsoft Office Applications