

# **Paul Kevin Bergey**

Email: pkbergey@vt.edu or pkbergey@compaq.net

## **WORK ADDRESS:**

### **Virginia Tech**

R. B. Pamplin College of Business  
Department of Management Science and Information Technology  
Blacksburg, VA 24061-0235

## **HOME ADDRESS**

### **Paul K. Bergey**

319 Copper Creek Circle  
Louisville, KY 40222  
Phone: (502) 412 – 2257

## **EDUCATION**

### **Virginia Tech - 1996 to Present**

Ph. D. Candidate - Department of Management Science and Information Technology  
Proposal defense completed on June 24, 1999  
Expected Completion – Spring, 2000

**Blacksburg, VA**

### **College of William and Mary - 1994 to 1996**

Master of Business Administration - Concentration in Management Information Systems

**Williamsburg, VA**

### **United States Merchant Marine Academy - 1983 to 1987**

Bachelor of Science – Marine Engineering

**Kings Point, NY**

## **PROFESSIONAL WORK EXPERIENCE**

### **Project Engineer - 1987 to 1994**

Responsible for testing and certification of propulsion plant systems aboard nuclear powered naval submarines. Developed, maintained and authorized test procedures for implementing quality control standards during the construction process. Performed operational testing of engineering systems to assess conformance to design criteria. Trained naval nuclear power school graduates to operate propulsion machinery in accordance with procedures. Negotiated with government agents for acceptance of completed contract requirements per engineering specifications. United States Naval Reserve Officer - 1987 to 1996 - Honorable Discharge.

**Newport News Shipbuilding**

## **TEACHING EXPERIENCE**

### **Quantitative Methods II - 1998 to 1999**

Taught undergraduate courses in management science using a spreadsheet centric approach to communicate modeling concepts and problem solving techniques. Topics covered include simple linear regression and correlation analysis, forecasting, decision analysis, linear programming, transportation and assignment methods, network models, and project management.

**Virginia Tech**

### **Quantitative Methods I - Summer 1998,1999**

Taught undergraduate courses in statistics, probability and other quantitative techniques commonly used in managerial decision making. Topics covered include data collection, descriptive statistics, probability theory, sampling distributions, and statistical inferential procedures.

**Virginia Tech**

### **Computer Simulation in Business - Fall 1996**

Taught undergraduate laboratory sessions in computer simulation using the ProModel simulation package.

**Virginia Tech**

## **TECHNICAL COMPUTER SKILLS**

**Windows NT Network Administrator** - System administrator for the Computer Information and Decision Support Systems laboratory at Virginia Tech. *Operating Systems*: Windows NT, Windows 95; *Programming Languages*: Visual Basic & VBA; *Web Server*: Internet Information Server (IIS).

**Software Development** - Experienced with development of Add-Ins for Microsoft Excel using Visual Basic for Applications. Designed and implemented mathematical algorithms for intelligent spreadsheet solvers.

**Simulation** - Experienced with computer simulation modeling using discrete event and continuous process techniques. *Simulation Tools*: ProModel, ServiceModel, Sigma, IFPS, Data by TreeAge.

## **RESEARCH ACTIVITIES**

### **Publications**

Bergey, P. K., Ragsdale, C. T. "Evolver 4.0 - The Genetic Algorithm Super Solver," *OR/MS Today*, August, 1999.

Bergey, P. K., Ragsdale, C. T. "Modified Differential Evolution - A Greedy Random Strategy for Genetic Reproduction," *Computers and Operations Research* (under review).

### **Conference Proceedings**

Bergey, P. K., "The Electrical Power Districting Problem - A Case Study in Designing Competitive Power Districts" *Proceedings of the 35<sup>th</sup> Annual Meeting of Southeast Chapter of the InfORMS*, Myrtle Beach, SC, 1999.

Bergey, P. K., "Selection Pressure - A Greedy Random Strategy for Genetic Reproduction" *Southeast Decision Sciences Institute - 29<sup>th</sup> Annual Meeting*, Savannah, GA, 1999 (1<sup>st</sup> Place in the student paper competition).

Bergey, P. K., "The Modified Differential Evolution Strategy - A General Purpose Genetic Algorithm" *Proceedings of the 34<sup>th</sup> Annual Meeting of Southeast Chapter of the InfORMS*, Myrtle Beach, SC, 1998 (1<sup>st</sup> Place in the student paper competition).

Bergey, P. K., "Differential Evolution Applied to the Two Group Classification Problem" *Proceedings of the 33<sup>rd</sup> Annual Meeting of Southeast Chapter of the InfORMS*, Myrtle Beach, SC, 1997.

### **Conference Workshops and Special Sessions**

Bergey, P. K., Ragsdale, C. T. "Using and Creating Add-Ins for Microsoft Excel" *Southeast Decision Sciences Institute - 28<sup>th</sup> Annual Meeting*, Roanoke, VA, 1998.

Bergey, P. K., Ragsdale, C. T. "What is VBA and Why should OR/MS Educators Care?" *34<sup>th</sup> Annual Meeting of Southeast Chapter of the InfORMS*, Myrtle Beach, SC, 1998.

## **Conference Service Activities**

General Assistant - *Southeast Decision Sciences Institute* – 28<sup>th</sup> & 29<sup>th</sup> Annual Meeting (1998, 1999).

General Assistant - 33<sup>rd</sup> Annual Meeting of Southeast Chapter of the *InfORMS* (1997).

## **SPECIAL AWARDS AND HONORS**

1. 1<sup>st</sup> Place in the Student Paper Competition, *Southeast Decision Sciences Institute*, 1999
2. 1<sup>st</sup> Place in the Student Paper Competition, *Southeast Chapter of InfORMS*, 1998.
3. R. B. Pamplin University Fellowship - Virginia Tech, 1999.
4. Congressional Appointment to attend USMMA - Kings Point, 1983 -1987.
5. NCAA Division I, Men's Racquetball Champion (Region 5) - Virginia Tech, 1997.

## **RELATED COURSE WORK**

<b>Management Information Systems</b>	<b>Management Science/Operations Research</b>
Distributed Data Processing & Network Communications	Optimization I
Object Oriented Programming	Optimization II
Foundations for Decision Support Systems	Random Processes
Computer Based DSS	Simulation
Information Center Functions	Probability Distribution Theory
Applied Human Factors Engineering	Applied Statistics
Advanced Database Management Systems	Management Science
Management Information Systems	Quantitative Methods I
Systems Analysis and Design	Quantitative Methods II
Decision Support Systems	Decision Processes Under Uncertainty
Database Management	Management of Operations Systems
Management Communications	Manufacturing Planning and Control Systems

## **REFERENCES**

<b>Professors:</b>	<b>Phone:</b>	<b>E-mail</b>
Dr. Cliff Ragsdale - Chair	(912) 681-5216	crag@vt.edu
Dr. Lance Matheson	(540) 231-5804	lance@vt.edu
Dr. Loren Rees	(540) 231-5050	loren@vt.edu
Dr. Robert Sumichrast	(540) 231-6152	rsumichr@vt.edu
Dr. Raymond Major	(540) 231-3163	rmajor@vt.edu
<b>Address:</b>		
Virginia Polytechnic Institute and State University R. B. Pamplin College of Business Department of Management Science and Information Technology Blacksburg, VA 24061-0235		