Dr. Ed Garbin, Ph.D., PE, D.GE
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Experience:

President 2017 to Present
Garbin GeoStructural Group, LLC – Clearwater Beach, FL

- Founder, specialty engineering consulting firm for the civil engineering/geo-structural industry. Apply innovation and originality to solve difficult and complex technical problems.
- Expertise in ground improvement design, specialty geo-structural design, risk management, peer review & feasibility studies, bid assistance, forensic engineering, litigation assistance, construction problem resolution, and developing/teaching continuing education courses/seminars for A/E/C professionals.
- Participate in/lead investigations and risk management studies to find solutions to critical problems for owners, developers, and contractors.
- Present/testify at mediations, particularly for changed conditions and construction damage claims.
- Experienced at being deposed as part of the litigation support team.

Vice President of Engineering 2015 to 2017
Earth Tech, LLC – Land O' Lakes, FL

- Lead technical authority for Earth Tech projects in the U.S. and Caribbean.
- Doubled revenue while improving quality and profitability and avoiding unnecessary risk.
- P&L responsibility, contract negotiations, hire/fire/mentor staff engineering and field professionals.
- Consulted for and negotiated with clients to prepare project specifications, bid documents, contracts.
- Planned, developed, and negotiated project budgets and resource requirements and allocations.
- Provided technical advice and consultation on variables affecting planning, integration, coordination, and critical management problems with respect to personnel safety and project economics.
- Developed and provided continuing education for Architects, Engineers, and Construction (A/E/C) professionals.
- Industry-recognized subject matter expert.

Chief Engineer, Southern Region 2007 to 2014
Hayward Baker, Inc. – Tampa, FL

- Lead technical authority for HBI ground improvement and earth retention projects in the southeastern U.S., Central America and the Caribbean. Managed regional development efforts for complex projects with multiple interfaces and extensive scope and variety.
- Directed regional research and development activities and published/presented key findings. Applied innovation and originality to solve difficult and complex technical problems.
- Member of Corporate Risk Management committee.
- Managed and directed regional design and field engineers.
- Collaborated with domestic and international colleagues on research and development activities, risk management, and development of company-wide design standard protocols.
- Coordinated with company domestic and international offices to establish content, cost, schedule of products, deliverables, and services for specialty geo-structural construction projects.
- Provided design, construction, and quality control expertise for specialty geo-structural systems.
- Organized, planned, and implemented development efforts for specialty geo-structural projects.
- Industry-recognized subject matter expert.
- Notable/ award-winning projects: Fort Lauderdale-Hollywood International Airport Runway Expansion (soil mixing, vibro replacement for high embankment support on soft soils), Edgewood Drive Extension (rigid inclusion-supported embankment over waste phosphatic clay), Marco Island Executive Airport (mass stabilization of soft coastal organics for new taxiway/apron), Petroterminales de Panama (multiple ground improvement techniques for liquefaction and consolidation mitigation beneath large diameter IFR steel oil storage tanks).

Geotechnical Engineering Manager 2003 to 2007
Universal Engineering Sciences, Inc. – Tampa, FL

- Lead geotechnical engineer for the UES Tampa branch. Served as a company-wide authoritative source of information for decisions and guidance concerning highly complex projects.
- Profitably managed the Geotechnical Engineering and Drilling departments, while consistently increasing annual revenue and profit without increasing risk or sacrificing personnel safety.
- P&L responsibility, contract negotiations, hire/fire/mentor engineering and field personnel.
- Provided technical advice and consultation on variables affecting planning, integration, coordination, and critical management problems with respect to personnel safety and project economics.
- Heavy client interaction and business development duties.

Project Engineer / Instrumentation Lab Director 1997 to 2003
Applied Foundation Testing, Inc. – Tampa, FL

- Executed full-scale static and StatNamic (rapid) load tests on deep and shallow foundations
- Hired and trained lab technicians in preparing high quality, piezoelectric and strain-type transducers.
- Applied innovation and originality to solve difficult and complex technical problems.

Adjunct Professor 2004 to 2011
Graduate Researcher / Instructor 1998 to 2003
University of South Florida – Tampa, FL

- Taught undergraduate courses in both structural and geotechnical engineering.
- Authored research proposals, project reports, presented research findings to industry professionals.

Engineering Technician 1994 to 1995
McClymont & Rak Engineers – Pennsauken, NJ

- Executed daily operations of soils, concrete, and asphalt testing in accordance with ASTM and NJDOT standards.
- Performed CPT/SCPT testing utilizing a 20-ton, box truck-mounted Hogentogler rig.

Construction Crew Chief 1984 to 1994
Asyla Construction – Blackwood, NJ

- Became skilled in heavy equipment operation, concrete placement and finishing, timber and metal framing, drywall installation, roofing, and siding.

Teaching Experience:

- **Geotechnical Engineering I – CEG 4011**
  Developed syllabus and overall course structure, lectured and administered all grades.
- **Geotechnical Engineering II – CEG 4012**
  Developed syllabus and overall course structure, lectured and administered all grades.
- **Concepts of Reinforced Concrete Design – CES 4702**
  Developed syllabus and overall course structure, lectured and administered all grades.
- **Mechanics of Materials – EGN 3331**
  Developed syllabus and overall course structure, lectured and administered all grades.
- **Mechanics of Material Laboratory – EGN 3331L**
  Developed syllabus and overall course structure, lectured and administered all grades, designed several new experiments, authored new Lab Manual.

Education:

University of South Florida — Tampa, FL
Ph.D. in Civil Engineering — 2003
- Field of Study: Geotechnical Engineering
- Dissertation: "Construction related difficulties with drilled shaft foundations and recommendations for mitigation"

University of South Florida — Tampa, FL
M.S. in Civil Engineering — 1999
- Field of Study: Geotechnical Engineering
- Extensive training in foundation load and integrity testing, cone penetrometer testing, advanced instrumentation systems, data acquisition systems, and data analysis
- Thesis: "Data regression for axial StatNamic testing and the development of the StatNamic analysis workbook"

University of South Florida — Tampa, FL
B.S. in Civil Engineering — 1998
- Field of Study: Structural Engineering
- Senior Project: designed a steel-framed main span replacement for the Howard Frankland Bridge in Tampa, FL

Camden County College — Blackwood, NJ
Associate in Science — 1995
- Field of study: Engineering Science
- Awarded "Outstanding Achievement in Physics"

Select Publications:

- Cook, C.R., Plaskett, M.E., and Garbin, E.J., (2015), “Ground Improvements for a Sloped Runway Expansion.” Proceedings, IFCEE 2015, San Antonio, Texas. March 17-21.
- Garbin, E.J., Hill, J.R., and Hussin, J.D., (2014), “Rigid Inclusions for Embankment Support over Waste Phosphatic Clay.” Proceedings, Geosynthetics Mining Solutions, Infomine, Vancouver, Canada. ISBN: 978-0-9917905-5-5.
- Hussin, J.D., Garbin, E.J., (2012), “Recent Advancements in the Use of Dry Mass Stabilization for Structural Support in the United States.” Proceedings, 4th International Conference on Grouting and Deep Mixing, Deep Foundations Institute, New Orleans, Louisiana.
- Garbin, Edward J., McIntosh, Kirk A., and Desai, Karishma R., (2011), “Mass Stabilization for Settlement Control of Shallow Foundations on Soft Organic Clay Soils.” Proceedings, Geo-Frontiers 2011 Conference, Geo-Institute of ASCE, Dallas, Texas.
- Garbin, Edward J., (2010), “Tank Site Remediation.” Tank Storage Magazine, September Issue, Horseshoe Media Ltd., London, UK.
- Garbin, Ed, Mann, Joseph A., (2010), “Mass Stabilization for Environmentally Sensitive Projects in Florida.” Proceedings, TRB 7th International Bridge Engineering Conference, San Antonio, Texas
- Garbin, Ed, Hussin, James, and Kami, Chikashi, (2010), “Earth Retention Using the TRD Method.” Proceedings, Earth Retention 2010, Geo-Institute of ASCE, Bellevue, Washington.
- Garbin, Edward J., Evans, Jeffrey C., and Hussin, James D., (2009), “Trench Cutting Remixing Deep (TRD) Method for Vertically Mixed-In-Place Cutoff Wall Construction at Herbert Hoover Dike.” Proceedings, Dam Safety 2009, Association of State Dam Officials, Hollywood, FL.
- Evans, Jeffrey C., and Garbin, Edward J., (2009), “The TRD Method for In Situ Mixed Vertical Barriers.” Proceedings, US-China Workshop on Ground Improvement Technologies IFCWEEF09, Orlando, FL.
- Garbin, E., Hioki, Y., Kami, C., and Lewis, C., (2009), “Evaluation of Trench Remixing Deep (TRD) Cutoff Wall Homogeneity Using Thermal Integrity Testing.” Proceedings, International Symposium on Deep Mixing & Admixture Stabilization, Okinawa, Japan.
- Garbin, Ed J., Jr., Mullins, A. G. (2004), “The Statnamic Analysis Workbook: A Tool for Automated Statnamic Data Analysis and Storage.” Journal of Engineering Technology, Fall 2004, pp. 18-24.
- McGillivray, R.T., Garbin, E.J., Jr., and Ashmawy, A.K. (2001), “Design of Geogrid Reinforcement for Heavily Loaded Pavement Systems.” Proceedings, Geosynthetics 2001, Portland, Oregon, pp. 795-807.

- Mullins, G., Garbin, E., Lewis, C., and Ealy, C. (1998), “Statnamic Testing: University of South Florida Research.” Second International Statnamic Seminar, Tokyo, Japan, October 28-30.

Awards:

- ASCE Ridge Branch Project of the Year (HBI). Edgewood Drive Extension, Lakeland, FL. Designer of an innovative ground improvement system, constructed by HBI, for embankment support over waste phosphatic clay (mine spoils/very soft soils). 2012.
- FDOT General Aviation Airport Project of the Year (HBI). Marco Island Executive Airport, Marco Island, FL. Designer of an innovative ground improvement system, constructed by HBI, allowing construction of new taxiway and apron over very soft, highly organic coastal marsh soils. 2012.
- Awarded the Provost's Commendation for Outstanding Teaching by a Graduate Student, University of South Florida, 2001 and 2002.
- Nominated for University of South Florida's Outstanding Master's Thesis Award, 1999.
- Awarded "Outstanding Achievement in Physics" for developing an interactive CD-ROM used as a teaching aid by the physics department of Camden County College, 1995.
- Listed on the Permanent President's List at Camden County College, 1995.

Affiliations:

- Academy of Geo-Professionals (AGP)
- American Society of Civil Engineers (ASCE)
- Geo-Institute of ASCE (GI)

Licensure:

- AL, DE, FL, GA, LA, MS, NC, NJ, NY, PA, SC, TN, TX, and WI Licensed Professional Engineer

Honors:

- Diplomate, Geotechnical Engineering (Academy of Geo-Professionals)
- Graduate, 2016 Florida Engineering Leadership Institute (FELI/FICE)