

EXECUTIVE SUMMARY

Seasoned seventeen-year project engineer/manager who tackles difficult and challenging engineering problems. An aggressive self-starter, Shane serves his clients with professional skill, integrity, and creativity but does not lose sight of the big picture. Intensely inquisitive, he is an innovator, who discovers and implements better ways to conduct business activities and processes.

PROFESSIONAL EXPERIENCE

Backcountry Design Group, LLC, Montrose, Colorado 2017 - Present
Forensic Engineer | Technical Writer

- Synthesize field engineering data from residential, commercial, and institutional building component failures into reports for non-engineers, detailing the nature and origin of damage.
- Carry out forensic investigations.
- Design and write corporate collateral for professional firms, including brochures, proposals, CVs, and web content.

Backcountry Design Group, LLC, Montrose, Colorado 2015 - 2017
Energy Engineer | Product Developer

- School district LED lighting retrofit, paid off in savings in less than two years.
- Residential energy assessments.
- Portable oilfield spill containment mat design and pre-production runs.

BrightLeaf Technologies, Inc., Montrose, Colorado 2008 - 2015
Engineer | Site Developer

- Developed and executed high-concentration photovoltaic/thermal solar energy projects. Completed financial and energy modeling, sourced and managed multi-disciplinary engineering consulting teams, produced construction, permitting, and utility interconnection documents.
- Developed software using PHP, Python, Bash, jQuery, and Arduino for data mining, collection, analysis, broadcasting, and storage; shading analysis for two-axis-tracked modules; and analytical solutions for heat transfer.
- Developed a hybrid thermal-electrical solar system with 70% sun-to-useful energy efficiency
- Negotiated \$1.5MM out of a \$6MM contract, installed on-time and on-budget against a tax-driven deadline while design and permitting were running concurrently.
- Granted four U.S. patents for technology developed during product design.



Buckhorn Geotech, Inc. (now DOWL, Inc.), Montrose, Colorado

2000-2008

Associate | Geotechnical Engineer

- Geotechnical investigations, testing, and reporting; retaining wall and shoring designs.
- Developed road stabilization guide for County, still used for road designs.
- Developed subsurface characterization tool adopted by all geotechnical firms in Western Colorado.
- »Brought deep foundation technology to Western Colorado resulting in creation of two successful specialty foundation and shoring contractors.

QUALIFICATIONS & EDUCATION

Colorado (United States) Professional Engineer #40692

British Columbia (Canada) Professional Engineer #32015

NABCEP Certified PV Installation Professional #PV-102415-012825 (currently inactive)

MASc, Geotechnical Engineering, University of British Columbia, 2001

BASc, Civil Engineering, University of British Columbia, 1998