

Jay Tarlecki

j@jaytarlecki.com

802-522-2153

WORK EXPERIENCE

GENERAL CONTRACTOR / CONSTRUCTION MANAGER (2014 – present)

New Market Builders – Philadelphia, PA

- Managed all aspects of custom residential construction, from initial design visit to site completion.
- Directed personnel operations, managed staff, provided training, and assured that quality standards were met with subcontractors throughout construction process.
- Specialized in estimating for materials, take-offs, site surveying, CAD drawings, ordering/receiving materials, on-site problem solving, and project management.
- Achieved success with clients by maintaining exceptional client contact and effective communication throughout the design/build process.

DIRECTOR OF INFORMATION SYSTEMS (2010 – 2014)

RealWinWin, Inc. – Philadelphia, PA

- Developed a national database of HVAC equipment incentives and a web service to give vendor partners real-time rebate information with estimates, and then built a web portal for registered users, with accompanying logging and reporting tools.
- Analyzed public rebate data for efficient motors, designed a database to store data, captured the data, designed a calculation algorithm, and built a mobile web app to give clients instant rebate information based on equipment and location.
- Constructed a forms-filling application that merged energy savings with project-specific data, yielding annual revenues of \$150K while saving 1,200 man-hours.
- Created software to scan and monitor incentive program websites for changes.
- Built software for printing invoices, resulting in annual revenue contribution of \$450K for 10,000 invoices and saving 1,000 man-hours.
- Developed a client reporting tool that allowed users to custom-tailor their own progress reports to over 50 clients on a weekly basis.
- Designed sixteen (16) automated reports to highlight employee achievements and notify team-members about project deadlines.
- Launched a company intranet and created its content, enabling employees to manage the data for aforementioned web-based calculators.
- Automated the electronic filing of scanned project documents, replacing an entirely manual process which saved 500 man-hours annually.
- Created a user interface that imported disparate CSV project data from clients to a local database, giving the user CRUD capability.
- Implemented GUI with selectable parameters that queried main project database (milliseconds) and integrated with existing CRUD application, replacing system that loaded 150K records (5 minute wait) and required user to find projects by filtering.
- Interviewed all employees to assess the efficiency of the company's overall process. Grouped employee tasks by hours and translated it to company earnings, resulting in a strategic plan to improve business logic.
- Managed a team of up to four (4) employees and two (2) consultants.
- Instrumental in developing three-year plan for company by setting goals with measurement criteria and fostering an environment for a data-driven business.

Languages

Java
Python
VB6, VBA
Javascript

Frameworks

Java:
Richfaces
WaveMaker
Hibernate
JSF
JSP

Python:

Django

Javascript:

Dojo Toolkit
jQuery

RDBMS

MS SQL Server
PostgreSQL
MySQL

Web Servers

Apache Tomcat
IIS

IDEs

Eclipse
Visual Studio
Wing

Version Control

Subversion
Git

Markup

HTML
XHTML
LaTeX

ENERGY ENGINEER (2009 – 2010)

RealWinWin, Inc. – Philadelphia, PA

- Created a repository of utility efficiency incentives for HVAC equipment based on geography, wrote a calculation algorithm, and made the job position obsolete.
- Transformed HVAC rebate database into a web service, securing a \$500K contract (plus >\$100K in future revenue), and integrated the service with customer's internal software. Acted as the sole developer and primary support for the project.
- Acquired lead engineering role in a relationship with an international vendor partner, performing 260+ custom energy reports quantifying over \$2.2MM in savings.
- Designed an OLE automation program for MS Outlook that scraped project data from incoming emails, collated data into a log with GUI, and generated weekly reports, replacing an entirely manual process.
- Automated the downloading of survey information for a large lighting retrofit (over 3,000 locations), which parsed the files for kW and kWh savings data and screened projects for viability.
- Performed energy savings calculations for commercial building retrofits, specializing in HVAC system ROI, simple payback, and energy efficiency incentives; processed over 4,000 energy-savings retrofit projects in first year worth \$550K in revenue (entire company earned just \$1.2 MM in previous year).
- Created a new avenue of business for the company with information management and founded a new department.

BOARD OF DIRECTORS, TREASURER (2011 – 2014)

FINANCE COMMITTEE CHAIR (2010 – 2014)

South Philly Food Co-op – Philadelphia, PA

- Oversaw the financial growth of the organization from its beginning to over 600 members, managing membership equity assets of over \$100K.
- Participated in all aspects of policy governance and operational management of a grassroots start-up business as an elected founding board member (two terms) and board officer (three terms).
- Designed, organized, and maintained the annual operational budget of over \$50K.
- Contributed to the financial pro forma for opening a grocery store, which contained sources and uses in excess of \$1.3M, ten year projections of cash flows, and a financial model for the formal business plan.
- Established a record keeping system, financial reports, and an expense reimbursement process.
- Supervised all financial transactions including issuing invoices, paying bills, keeping a balanced budget, complying with grants, providing financial statements, and filing annual corporate taxes.

FREELANCE DESIGN/BUILD (2005 – present)

Self-employed – Philadelphia, PA

- Scraped data from public websites to design a national database of financial incentives for renewable energy and energy efficiency (>1MM records) and created a RESTful [rebate information API](#) that provides incentive information in JSON format, resolved to the ZIP code level.
- Created a [renovation calculator](#) mobile web app to help builders and homeowners quickly estimate remodeling costs by entering their own room configuration and local material prices.
- General contracted many residential new construction and renovation projects, focusing on energy efficiency, super-insulation, local materials, and both passive and active solar design.
- Specialized in project management, shop drawings, engineering and sizing beams, timberframing, and rough to finish carpentry, custom built-ins, stair building, and high-end moldings.
- Participated in design/build of a school house for [Rancho Mastatal](#) in Costa Rica through a five-month internship at [Yestermorrow School](#), constructed entirely out of materials sourced locally.
- Currently involved in a [major renovation](#) of primary residence in South Philadelphia.

TREE HOUSES AND SPECIALIZED WOODWORKING (2006 – 2009)

Self-employed - nationwide

- Provided consulting and woodworking for [Forever Young Treehouses](#), a non-profit with a mission to build universally-accessible (ADA compliant) [tree houses](#) for children with physical disabilities.
- Duties included project management, CAD drawings, timberframing, French scribing, custom metal fabrication, logging and chainsaw work, and rough to finish carpentry.
- Was an integral part of a small team that completed numerous multimillion dollar tree houses, both public and private, on budget and on time.
- Taught carpentry to fifteen at-risk youth in a work-based learning program organized by the [Fred G. Acosta Job Corps Center](#).

RESEARCH AND TEACHING ASSISTANT (2002 – 2005)

University of Pennsylvania – Philadelphia, PA

- Research investigated the feasibility of electrical power generation in Low Earth Orbit, with heavy focus on thermodynamics, heat transfer and fluid mechanics.
- Taught undergraduate and graduate level courses in mechanics of materials, heat transfer, and aerodynamics.

ARCHITECTURE AND ENGINEERING (1998 – 2001)

Various – Philadelphia, PA

- Worked for [Kling Stubbins](#), [Ewing Cole](#), and the [City of Philadelphia – Department of Streets](#) providing mechanical and structural engineering.
- Duties included load calculations, HVAC design, equipment and beam sizing, CAD drawings, surveying, and piping schematics.

SELECTED ACCOMPLISHMENTS

Expert project evaluator for the [Research Council of Norway's](#) energy research program [ENERGIX](#), 2015

Jason Tarlecki, Noam Lior, Na Zhang, "Analysis of thermal cycles and working fluids for power generation in space", *Energy Conversion and Management*, Volume 48, Issue 11, November 2007, Pages 2864-2878. [\[link\]](#)

Jason Tarlecki, Noam Lior, Na Zhang, "Evaluation of some thermal power cycles for use in space", *Proc. ECOS 2006, 19th Conference on Efficiency, Costs, Optimization, Simulation and Environmental Aspects of Energy Systems*, Crete, Greece, 12-14 July 2006. [\[link\]](#)

FE/EIT Pennsylvania License # ETO14852

EDUCATION

UNIVERSITY OF PENNSYLVANIA, Philadelphia, PA, Master of Science in Engineering, 2005

Thesis topic: Power Generation in Space for Terrestrial Use

Honors: Ashton Fellowship

DREXEL UNIVERSITY, Philadelphia, PA, Bachelor of Science in Mechanical Engineering, 2001

Senior Design Project: Design/Build of chassis for the Drexel Formula SAE race car

Honors: A.J. Drexel Scholarship, Mildred Huber Scholarship, and Herman Schaevitz Memorial Scholarship