

Hanni Abu

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EDUCATION

New Jersey Institute of Technology, Newark, New Jersey

Bachelor of Science, Dec 2013

Major: Mechanical Engineering

EXPERIENCE

Verticulture Farms

Software Developer

Brooklyn, NY

March 2015 – Present

- Automate facility operations such as seeding, filter cleaning, fish feeding, monitoring, and nutrient dosing
- Develop and implement data acquisition software, equipment, and methods
- Analyze data sets to inform growing methods, operations, and business decisions
- Maintain database, monitoring-software, monitoring-equipment, and company website
- Generate monitoring dashboards with data visualization

City-Hydroponics

Director of Research & Development

Brooklyn, NY

Jan 2013 – Dec 2014

- Developed prototype hydroponic apparatus (VOHS) into a commercially viable product
- Increased efficiencies per area while decreasing unit costs and installation time
- Improved system reliability and safety by adding additional features
- Routinely met with team, current and prospective investors, clients, and manufacturers
- Consulted with overseas manufacturers to dramatically decrease component costs
- Worked with frame fabricators to further optimize design and decrease manufacturing costs
- Created testing studies to evaluate growth of plants under several conditions
- Collaborated with intellectual property lawyer to create patent and protect various design aspects
- Compiled materials and componentry orders for testing and installation build-outs

NJIT Formula Society of Automotive Engineers (FSAE)

Frame Design Team Lead

Newark, NJ

Sept. 2012 – July 2014

- Design Formula-1 vehicle chassis around FSAE rule constraints and components requirements
- Collaborate with other team leads to meet design needs
- Optimized frame to meet weight, cost, and strength goals while complying with all FSAE rules
- Test design performance through physical and virtual torsional and bending analysis

NJIT Innovation Acceleration Club

President

Newark, NJ

Sept. 2011 – Jan. 2012

- Assist students in preparing business plans, presentations, and a target timeline
- Organize and coordinate meetings and presentations between venture capitalists and students
- Find competitions for students to submit or pitch their business plans

PERSONAL PROJECTS

Learning (currently) – Django, React/JSX, refining on statistics and data analysis with Python and D3.js

Velcro (3/2015) – A visual panel used to customize and create base Bootstrap HTML and classes

CopyPaste (1/2015) – A game based off the question of what the maximal pattern of copying and pasting is

ADDITIONAL SKILLS

Platforms: Windows, Mac OS, WAMP, Wordpress, Raspberry Pi, Arduino, familiar with Linux OS

Programming: Python, Javascript, PHP, HTML, CSS, SQL, Matlab, familiar with C++, Mongo DB, Bash/Shell scripting

Developer Tools: NPM, Bower, Gulp, Sass, jQuery, Bootstrap, Git, Sublime Text 3