Technology and Experience
Being a Third-Party Algorithm Developer

TeleSecurity Sciences, Inc. (TSS)

Las Vegas, NV

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TeleSecurity Sciences, Inc.

- Launched in January 2006
  - Founders:
    - D. Boyd, Ph.D., Imatron, InVision, etc.
    - S. Song, Ph.D.
    - H. Hu, Ph.D.
  - First product: Common Workstation (CW)
    - 3D EDS Workstation (2006)
    - CGUI for EDS (2011) → CW for Checkpoint CT (2019) → CW for OPS (2021)
  - Second product: Automatic Threat Recognition (ATR)
    - Automatic Threat Recognition (2010)
    - ALERT Segmentation Challenge (2010)
    - SBIR (2012) → BAA 13-05 (2013) → BAA 17-03 (2017) → LRBAA (2020) → LRBAA (2022)

Funding

- Private Investments
  - Individuals (Seed, 2006)
  - Institution (Series A, 2009)
  - Institution (Series B, 2013)

- Industrial Contracts
  - Development contracts (ATR, eBeam Control, Reconstruction, etc.)
  - Licensing
    - CW: four OEM/vendor
    - ATR: one OEM

- Federal Funding
  - DHS S&T, DNDO, TSA and NIH

- Spin-offs: two medical companies

Staffing

- Close to a hundred employees (EE, ME, Math, Physics, CS, Chemistry, Finance, etc.) have worked for TSS/spin-offs.

- Competing with tech giants: not easy.
  - Have lost good/mediocre developers to Amazon, Google, etc.
  - Two current developers have been with TSS since the "beginning"

- Enticing people to move to Las Vegas: not easy
  - Hiring UNLV graduates, interns

Some Stories

- Certain experiences with Federal contracts
  - White paper gets accepted, full proposal submitted. Program cancelled.
  - Award letter received, then rescinded.
  - Therefore, contract must be signed, otherwise no guarantee.

- Investments
  - Very, very difficult
  - Money must be received, otherwise no guarantee.

- NIH vs DHS/TSA programs
  - NIH is more competitive
  - DHS/TSA programs are more demanding with weekly, bi-weekly or monthly meetings.

Summary

- This is a tough business area.

- Funding
  - Continue to submit proposals: DHS S&T, TSA
  - Slight up-tick in licensing fees
  - Remain upbeat

- Staffing
  - Hire as needed

- Licensing