

# Pennsylvania Gaming Control Board

# VACANCY ANNOUNCEMENT

“AN EQUAL OPPORTUNITY EMPLOYER”

POSTING DATE: 1/10/2024

CLOSING DATE: Posted Until Filled

CLASS TITLE: Statistician,  
Office of Gaming Laboratory  
Operations

LOCATION: Commonwealth Tower 10<sup>th</sup> Floor  
303 Walnut Street  
Harrisburg, PA 17101

TYPE OF SERVICE: Non-Civil Service

UNION COVERAGE – AFSCME

WORK HOURS: 8:30 – 5:00, (37.5 hrs. weekly)

(Telework Options Available  
Within the Commonwealth of PA Only)

PAY SCALE GROUP 8:

Starting Salary - \$64,959

(Non-Negotiable, Pay Rules Apply to Existing  
Commonwealth Employees)

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## DEFINITION:

Under administrative direction of the Gaming Laboratory, responsible for evaluating the theoretical return for each gaming theme submitted for review with particular attention to specific rules involving payout percentages, odds, volatility, symbol weights, bonus triggers and the specific rules of each game play. Perform analysis of pseudo random number generators used for gaming purposes.

Supervision is received from a Gaming Laboratory Manager.

**EXAMPLES OF WORK:** *(NOTE: The examples of work are representative of the work, but every position classification to this job may not perform all examples of work listed. Conversely, this is not an all-inclusive list of work examples.)*

Perform sufficient analysis of each different game theme to ensure compliance with regulations regarding payback percentage, volatility, odds of all available awards, symbol weights, rules for bonus triggers and any unique rules for each game.

Verification via independent analysis of simulation programs submitted by manufacturers and used for mathematical, statistical and probability calculations to determine accuracy and, with regard to regulatory goals, integrity. Simulation programs are used to run a series of statistical tests to produce a confidence limit of attributes that are permissible within the rules.

Determines the combinatory outcome of all payouts represented in the submitted program using probability, statistics, and permutation formulas.

Develops computer algorithms to assist the agency in performing the necessary mathematical, statistical and probability calculations required for game analysis.

Uses the appropriate statistical tools to analyze the collected data to determine the randomness in the

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application of the pseudo random number generator to include chi2 test, runs test, and a serial correlation test.

Creates reports and graphs to document the analysis and findings.

Confirm accuracy and completeness of submission packages and accuracy of accompanying checklist(s).

Confirm statistical analysis of gaming devices.

Coordinates with field units to verify that progressive parameters are within compliance.

Verifies accuracy of award tables, rules and game description.

Travels as necessary to complete assignments.

Performs other related duties.

### **BASIC ESSENTIAL JOB FUNCTIONS:**

Ability to operate a personal computer, telephone, copy machine, fax machine, and other similar office equipment.

Ability to communicate verbally and in writing in the English language.

Ability to follow verbal and written instructions.

Ability to interpret and apply policies and procedure.

Ability to work in a smoking and non-smoking casino environment.

Ability to work in a typical gaming environment which includes but is not limited to constant flashing lights, constant noise, and crowded areas.

Ability to operate an automobile.

Ability to travel as required.

### **MINIMUM EXPERIENCE AND TRAINING:**

A bachelor's degree in Statistics or Applied Mathematics or two years of progressively responsible experience in the application of statistical analysis, and programming in SAS or other analytical languages;

OR

Two or more years' experience in gaming product analysis;

OR

An equivalent combination of experience and training.

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**HOW TO APPLY:** Qualified applicants must submit a completed PGCB employment application along with a resume to Joseph Bott at [pgcbjobapplicant@pa.gov](mailto:pgcbjobapplicant@pa.gov) by the closing date of this posting. A copy of this application is available on the PGCB website at <http://gamingcontrolboard.pa.gov/> Selected applicants will then be contacted and an interview will be arranged.

**NOTE: Employment is contingent upon the completion of a Personal History Questionnaire with a thorough background investigation, including drug screening and the subsequent review and approval by the Board.**

A brief description of the duties is included under the **JOB DUTIES** section listed above. **Also included are the position's essential job functions as required by the Americans With Disabilities Act (ADA).**

**IF YOU NEED AN ACCOMMODATION DUE TO A DISABILITY WHEN INTERVIEWING FOR THIS POSITION, PLEASE ADVISE THE PERSON WHO CONTACTS YOU FOR THE INTERVIEW.**

**CONTACT: PGCB Human Resource Office**

**ADDRESS:** 303 Walnut Street  
Harrisburg, PA 17101

**TELEPHONE:** (717) 346-8300

**E-MAIL:** [jbott@pa.gov](mailto:jbott@pa.gov)